



Formosa Plastics®

Formosa Plastics Corporation, Texas
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Point Comfort, TX 77978
Telephone: 361-987-7000

October 30, 2018

Certified Mail: 7018 0360 0000 5327 8767
Air Section Manager, Region 14
Texas Commission Environmental Quality
6300 Ocean Drive, Suite 1200
Corpus Christi, Texas 78412

RE: Formosa Plastics Corporation, Texas
TCEQ Air Quality Account No. CB-0038-Q
Third Quarter 2018 SUMMA Canister Report

Dear Air Section Manager:

Per your request, we have enclosed a quarterly summary of results from the Point Comfort SUMMA Canister Monitoring System. The third quarter of 2018 results are shown for each site on the attached tables. Additionally, we have included wind roses generated by the weather sensor on the FTIR or wind direction data from other air monitoring devices for each SUMMA canister sampling date during the third quarter of 2018.

Beginning with the first sample date in the fourth quarter 2003, we have also included average wind speed and wind direction on the tables. This was done at the request of Mr. David Carmichael of the TCEQ Austin office. In addition, at the request of Mr. Carmichael, the following changes have been made to the tables:

The duplicate sample data for all compounds has been removed from the VOC Canister Analysis Tables;

The averaged duplicate sample data was replaced with only the routine sample data in the VOC Canister Analysis Tables; and

An additional VOC Canister Analysis Table was created for the duplicate samples data. This was done so that the relative percent difference (RPD) could be calculated. The calculation for obtaining the RPD is shown in the Duplicate Sample section of the attached Calculation Methodology.

During a telephone conversation with Mr. Vincent Leopold (TCEQ TARA Group) on April 9, 1998, he requested a disk copy of the SUMMA Canister sampling results be included with the quarterly report. Enclosed is an electronic copy of the third quarter 2018 SUMMA Canister Report.

October 30, 2018

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Should you have any questions please contact Vanessa Peppers by e-mail at
VanessaP@ftpc.fpcusa.com.

Sincerely,



Rick Crabtree
Vice President/General Manager
Formosa Plastics Corporation, Texas

Attachments

cc: Dr. Tracie Phillips
Toxicology Division
Texas Commission on Environmental Quality
P. O. Box 13087
Austin, Texas 78711-3087

Certified Mail: 7018 0360 0000 5327 8682

FORMOSA PLASTICS CORPORATION, TEXAS

SUMMA CANISTER QUARTERLY REPORT

CALCULATION METHODOLOGY

Following is the calculation methodologies used to calculate the Year-To-Date Sum and Year-To-Date Average for the four SUMMA canister sampling sites. Please note, there are two columns associated with each component analyzed. The column titled “Actual” represents the results reported by the independent laboratory contracted to analyze the SUMMA canisters. The column titled “½ Reported LOD (Limit of Detection)” represents either the actual result or one-half the limit of detection reported by the laboratory, as appropriate.

ACTUAL

The following is entered into the column titled “Actual”:

Numerical Value - Actual results reported by the independent laboratory when the result is equal to or greater than the limit of detection. The numerical value is used to calculate the year-to-date sum and the year-to date average;

ND (Non Detect) - As reported by the laboratory. The value of “0” is used to calculate the year to date sum and the year-to-date average;

BDL (Below Detection Limit) - Entered when the actual result is less than the reported limit of detection. The value of “0” is used to calculate the year-to-date sum and the year-to-date average;

“*” - Non operational sampling period.

½ REPORTED LOD (LIMIT OF DETECTION)

The following is entered into the column titled “½ Reported LOD”:

Numerical Value - Actual results reported by the independent laboratory when the result is equal to or greater than the limit of detection. The numerical value is used to calculate the year-to-date sum and the year-to-date average;

½ the Reported Limit of Detection - ½ the reported limit of detection when the results are reported as non-detect and when the actual result is below the detection limit (BDL). ½ the reported limit of detection is used to calculate the year-to-date sum and the year-to-date average.

“*” - Non operational sampling period.

FORMOSA PLASTICS CORPORATION, TEXAS

SUMMA CANISTER QUARTERLY REPORT

Limit of Detection (LOD) - Method Detection Limit, Limit of Detection, Reporting Limit, etc... as reported by the independent laboratory conducting the analysis.

DUPLICATE SAMPLES

Beginning with the revised First Quarter 2004 Report, submitted on October 22, 2004, the duplicate samples will be reported discreetly on a separate VOC Canister Analysis Table. This is done so that the duplicate samples can be compared to the routine samples and the Relative Percent Difference (RPD) can be calculated. The RPD is calculated using the following equation:

$$\{(X_1-X_2) / [(X_1+X_2) / 2]\} \times 100$$

Mr. David Carmichael provided this equation in his August 20, 2004 e-mail request for changes. Where the duplicate and routine sample indicated "ND", the RPD is reported as "ND". Where the duplicate or routine sample indicated "ND" and the other indicated a concentration greater than ND, the RPD is calculated by using the value entered in the actual concentration column and the value entered in the $\frac{1}{2}$ Reported LOD column.

YEAR-TO-DATE SUM

The year-to-date sum is calculated by taking the sum of all values entered in the column.

YEAR-TO-DATE AVERAGE

The following formula is used to calculate the year-to-date average:

$$\text{Year-To-Date Sum} / (\text{Number of theoretical sample periods} - \text{Number of non operational sample periods})$$

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - CITY HALL SITE

SAMPLE DATE	AVG.WIND DIRECTION (Degrees)	AVG.WIND SPEED (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
10/3/2017	83	6.2	ND	0.0500	ND	0.1250	ND	0.0500	1.6900	1.6900	ND	2.5200
10/9/2017	130	6.3	ND	0.0500	ND	0.1250	ND	0.0500	ND	ND	ND	0.0500
10/15/2017	241	4.6	ND	0.0500	ND	0.1250	0.1210	ND	0.0500	0.3840	ND	0.3840
10/21/2017	115	6.0	ND	0.0500	ND	0.1250	0.1080	ND	0.0500	ND	ND	0.0500
10/27/2017	224	6.0	ND	0.0500	ND	0.1250	0.2210	ND	0.0500	ND	ND	0.0500
11/22/2017	153	5.6	*	*	*	*	*	*	*	*	*	*
11/8/2017	222	7.9	ND	0.0500	ND	0.1250	0.2980	0.2980	0.9010	0.9010	ND	0.0500
11/14/2017	89	5.0	ND	0.0500	ND	0.1250	0.2530	0.2530	ND	0.0500	ND	0.0500
11/20/2017	72	4.3	ND	0.0500	ND	0.1250	0.3340	0.3340	0.1940	0.1940	0.5530	0.5530
11/26/2017	103	2.6	ND	0.0500	ND	0.1250	0.3910	0.3910	0.3960	0.3960	0.8240	0.8240
12/22/2017	97	4.1	ND	0.0500	ND	0.1250	0.2570	0.2570	ND	0.0500	ND	0.0500
12/8/2017	257	3.5	ND	0.0500	ND	0.1250	0.1450	0.1450	ND	0.0500	ND	0.0500
12/14/2017	218	2.2	ND	0.0500	ND	0.1250	0.2730	0.2730	ND	0.0500	0.1300	*
12/18/2017	128	2.1	*	*	*	*	*	*	*	*	*	*
12/26/2017	196	4.1	*	*	*	*	*	*	*	*	*	*
1/5/2018	71	5.0	*	*	*	*	*	*	*	*	*	*
1/11/2018	202	8.9	*	*	*	*	*	*	*	*	*	*
1/17/2018	311	4.2	*	*	*	*	*	*	*	*	*	*
1/23/2018	275	4.0	*	*	*	*	*	*	*	*	*	*
1/29/2018	341	5.6	*	*	*	*	*	*	*	*	*	*
2/4/2018	197	5.2	ND	0.0500	ND	0.1250	0.2470	0.2470	ND	0.0500	0.1070	0.1070
2/10/2018	218	3.8	ND	0.0500	ND	0.1250	0.8060	0.8060	0.6680	0.6680	ND	0.0500
2/16/2018	147	ND	0.0500	ND	0.1250	0.4030	0.4030	ND	0.0500	1.7000	ND	1.7000
2/22/2018	315	6.2	*	*	*	*	*	*	*	*	*	*
2/28/2018	145	10.1	ND	0.0500	0.377	0.3770	1.6500	1.6500	ND	0.0500	ND	0.0500
3/6/2018	211	8.3	ND	0.0500	ND	0.1250	0.8420	0.8420	0.4750	0.4750	0.2470	0.2470
3/12/2018	279	7.4	ND	0.0500	ND	0.1250	0.5510	0.5510	0.6320	0.6320	ND	0.0500
3/18/2018	125	5.4	ND	0.0500	ND	0.1250	0.6160	0.6160	ND	0.0500	ND	0.0500
3/24/2018	146	7.7	ND	0.0500	ND	0.1250	0.2300	0.2300	ND	0.0500	ND	0.0500
3/30/2018	176	7.1	ND	0.0500	ND	0.1250	0.4860	0.4860	0.4690	0.4690	0.1390	0.1390
4/5/2018	96	5.6	ND	0.0500	ND	0.1250	0.1900	0.1900	ND	0.0500	0.1160	0.1160
4/11/2018	114	4.4	ND	0.0500	ND	0.1250	0.3390	0.3390	0.1510	0.1510	0.1730	0.1730
4/17/2018	144	9.7	ND	0.0500	ND	0.1250	0.3190	0.3190	ND	0.0500	ND	0.0500
4/23/2018	243	1.2	ND	0.0500	ND	0.1250	0.2270	0.2270	2.5900	2.5900	0.8170	0.8170
4/29/2018	106	5.5	ND	0.0500	ND	0.1250	0.1580	0.1580	ND	0.0500	ND	0.0500
5/5/2018	320	3.5	ND	0.0500	ND	0.1250	0.4130	0.4130	0.9900	0.9900	0.2730	0.2730
5/11/2018	122	9.1	ND	0.0500	ND	0.1250	0.1340	0.1340	ND	0.0500	ND	0.0500
5/17/2018	159	6.0	ND	0.0500	ND	0.1250	0.1250	0.1250	ND	0.0500	ND	0.0500
5/23/2018	96	5.2	*	*	*	*	*	*	*	*	*	*
5/29/2018	144	5.2	ND	0.0500	ND	0.1250	0.1680	0.1680	ND	0.0500	0.1630	0.1630
6/4/2018	169	4.4	ND	0.0500	ND	0.1250	0.1800	0.1800	0.1090	0.1090	0.1030	0.1030
6/10/2018	140	8.8	ND	0.0500	ND	0.1250	0.1750	0.1750	ND	0.0500	ND	0.0500
6/16/2018	114	5.9	ND	0.0500	ND	0.1250	ND	ND	0.0500	0.1760	ND	0.1760
6/22/2018	151	4.9	ND	0.0500	ND	0.1250	0.2280	0.2280	ND	0.0500	0.1380	0.1380
6/28/2018	143	7.0	ND	0.0500	ND	0.1250	0.2150	0.2150	ND	0.0500	ND	0.0500
7/4/2018	126	7.1	ND	0.0500	ND	0.1250	0.1020	0.1020	0.8600	0.8600	6.1100	6.1100
7/10/2018	121	4.6	ND	0.0500	ND	0.1250	0.5820	0.5820	ND	0.0500	ND	0.0500
7/16/2018	153	ND	0.0500	ND	0.1250	0.2210	0.2210	ND	0.0500	0.1760	ND	0.1760
7/22/2018	176	5.7	ND	0.0500	ND	0.1250	0.1850	0.1850	ND	0.0500	0.1990	0.1990
7/28/2018	133	4.0	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	0.0500	ND	0.0500
8/3/2018	107	4.1	ND	0.0500	ND	0.1250	0.3850	0.3850	0.6580	0.6580	0.7690	0.7690

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - CITY HALL SITE

SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	ETHYLENE	1,3 BUTADIENE	BENZENE	VINYL CHLORIDE	ETHYLENE DICHLORIDE
		(ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
8/9/2018	138	5.6	ND	0.0500	ND	0.1250	ND
8/17/2018	135	6.0	ND	0.0500	ND	0.1250	ND
8/21/2018	155	5.4	ND	0.0500	ND	0.2890	ND
8/29/2018	121	4.3	ND	0.0500	ND	0.1220	ND
9/6/2018	91	1.8	ND	0.0500	ND	0.1250	ND
9/12/2018	60	4.6	ND	0.0500	ND	0.1250	ND
9/18/2018	187	1.3	*	*	*	0.1530	0.1930
9/24/2018	115	4.5	ND	0.0500	ND	0.1250	ND
9/30/2018	67	3.3	ND	0.0500	ND	0.1250	ND

ETHYLENE	1,3 BUTADIENE	BENZENE	VINYL CHLORIDE	ETHYLENE DICHLORIDE
Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
Year-To-Date Sum	0.0000	2.4500	0.3770	6.3770
Rolling Year Average	0.0000	0.0500	0.0077	0.1301
Annual Average	0.0000	0.0500	0.0000	0.1250

Number of theoretical sample periods
Number of non operational sample periods

Actual (ppb) 1/2 Reported LOD (ppb)
ND ND
0.0500 0.0500
0.2890 0.2890
0.1220 0.1220
0.0500 0.0500
0.1250 0.1250
0.1930 0.1930
0.1530 0.1530
*
 * | * | * | * || ND | ND | ND | ND | ND |
| 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 |
| 0.1100 | 0.1100 | 0.1100 | 0.1100 | 0.1100 |
| ND | ND | ND | ND | ND |
| 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 |
| 1.2400 | 1.2400 | 1.2400 | 1.2400 | 1.2400 |

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

TCEQ Air Monitoring Comparison Values (ppb)		Investigation
Chemical	ST	Limit (ppb)
Vinyl Chloride	27,000	0.47
Ethylene Dichloride	94	0.72
Benzene	180	1.4
Ethylene	500,000	30
1,3 Butadiene	1,700	9

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - CITY HALL
DUPLICATE SAMPLE SCHEDULE

SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	Ethylene (ppb)	I/2 Reported LOD (ppb)	I,3 Butadiene (ppb)	Actual (ppb)	I/2 Reported LOD (ppb)	Benzene (ppb)	Vinyl Chloride (ppb)	Actual (ppb)	I/2 Reported LOD (ppb)	Ethylene Dichloride (ppb)	Actual (ppb)	I/2 Reported LOD (ppb)
10/21/17	115	6.0	ND	0.0500	ND	0.1250	0.1080	0.1080	ND	0.0500	ND	0.0500	ND	0.0500
10/21/17 _a	115	6.0	ND	0.0500	ND	0.1250	0.1160	0.1160	ND	0.0500	ND	0.1460	ND	-97.9592
Relative Percent Difference (RPD)														
12/02/17	97	4.1	ND	0.0500	ND	0.1250	0.2570	0.2570	ND	0.0500	ND	0.0500	ND	0.0500
12/03/17 _a	97	4.1	ND	0.0500	ND	0.1250	0.2820	0.2820	0.1390	0.1390	0.1280	0.1280	0.1280	-87.6404
Relative Percent Difference (RPD)														
02/10/18	94	5.4	ND	0.0500	ND	0.1250	0.8060	0.8060	0.6680	0.6680	ND	ND	ND	0.0500
02/16/18 _a	94	5.4	ND	0.0500	ND	0.1250	1.1600	1.1600	0.8460	0.8460	ND	ND	ND	0.0500
Relative Percent Difference (RPD)														
03/12/18	279	7.4	ND	0.0500	ND	0.1250	0.5510	0.5510	0.6320	0.6320	ND	ND	ND	0.0500
03/12/18 _a	279	7.4	ND	0.0500	ND	0.1250	0.4600	0.4600	0.5360	0.5360	0.1140	0.1140	0.1140	-78.0488
Relative Percent Difference (RPD)														
03/24/18	146	7.7	ND	0.0500	ND	0.1250	0.2300	0.2300	ND	0.0500	ND	ND	ND	0.0500
03/24/18 _a	146	7.7	ND	0.0500	ND	0.1250	0.2310	0.2310	ND	0.0500	ND	ND	ND	0.0500
Relative Percent Difference (RPD)														
05/05/18	320	3.5	ND	0.0500	ND	0.1250	0.4130	0.4130	0.9900	0.9900	0.2730	0.2730	0.2730	0.0500
05/05/18 _a	320	3.5	ND	0.0500	ND	0.1250	0.3700	0.3700	1.2000	1.2000	0.1500	0.1500	0.1500	0.0500
Relative Percent Difference (RPD)														
06/16/18	114	8.9	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	0.0500	ND	ND	ND	0.0500
06/16/18 _a	114	8.9	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	0.0500	ND	ND	ND	0.0500
Relative Percent Difference (RPD)														
07/16/18	153	5.9	ND	0.0500	ND	0.1250	0.2210	0.2210	ND	0.0500	0.1760	0.1760	ND	ND
07/16/18 _a	153	5.9	ND	0.0500	ND	0.1250	0.2380	0.2380	ND	0.0500	0.1720	0.1720	ND	ND
Relative Percent Difference (RPD)														
09/30/18	65	2.2	ND	0.0500	ND	0.1250	0.5390	0.5390	2.3200	2.3200	1.2400	1.2400	ND	ND
09/30/18 _a	65	2.2	ND	0.0500	ND	0.1250	0.5620	0.5620	2.3100	2.3100	1.1400	1.1400	1.1400	ND
Relative Percent Difference (RPD)														
														8.4034

^a = non operational, data from the North site was used for Wind Direction and Wind Speed, if available

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - FORMOSA TRAINING COMPLEX

SAMPLE DATE	AVG. WIND DIRECTION (Degrees)	AVG. WIND SPEED (mph)	ETHYLENE		1,3-BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
10/3/2017	83	6.2	0.1860	*	ND	0.1250	0.1510	0.5030	0.5030	0.2510	0.2510	*
10/9/2017	130	6.3	*	*	*	*	*	*	*	*	*	*
10/15/2017	241	4.6	*	*	*	*	*	*	*	*	*	*
10/21/2017	115	6.0	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
10/27/2017	224	6.0	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
11/2/2017	153	5.6	*	*	*	*	*	*	*	*	*	*
11/8/2017	222	7.9	ND	0.0500	2.16	2.1600	0.1490	0.0870	0.0870	ND	ND	0.0500
11/14/2017	89	5.0	ND	0.0500	2.26	2.2600	0.2220	ND	0.0500	ND	ND	0.0500
11/20/2017	72	4.3	ND	0.0500	ND	0.1250	0.3340	0.3340	0.1940	0.1940	0.5530	0.5530
11/26/2017	103	2.6	ND	0.0500	ND	0.1250	0.4850	0.4850	0.9200	0.9200	1.4800	1.4800
12/2/2017	97	4.1	ND	0.0500	ND	0.1250	0.2600	0.2600	0.1220	0.1220	0.2410	0.2410
12/8/2017	257	3.5	ND	0.0500	ND	0.1250	0.1340	ND	0.0500	ND	ND	0.0500
12/14/2017	218	2.2	ND	0.0500	ND	0.1250	0.2170	0.2170	0.7390	0.7390	0.1380	0.1380
12/18/2017	128	2.2	ND	0.0500	ND	0.1250	0.2340	0.2340	ND	0.0500	ND	0.0500
12/26/2017	196	4.1	*	*	*	*	*	*	*	*	*	*
1/5/2018	71	5.0	*	*	*	*	*	*	*	*	*	*
1/11/2018	202	8.9	*	*	*	*	*	*	*	*	*	*
1/17/2018	311	4.2	*	*	*	*	*	*	*	*	*	*
1/23/2018	275	4.0	ND	0.0500	ND	0.1250	0.5740	0.5740	0.6610	0.6610	ND	0.0500
1/29/2018	341	5.6	ND	0.0500	ND	0.1250	0.1420	ND	0.0500	ND	ND	0.0500
2/4/2018	197	5.2	ND	0.0500	ND	0.1250	0.4520	0.4520	0.2290	0.2290	0.1430	0.1430
2/10/2018	218	3.8	ND	0.0500	ND	0.1250	0.5940	0.5940	0.8710	0.8710	ND	0.0500
2/16/2018	147	5.1	ND	0.0500	ND	0.1250	0.1250	ND	0.0500	2.9300	2.9300	2.9300
2/22/2018	315	6.2	*	*	*	*	*	*	*	*	*	*
2/28/2018	145	10.1	ND	0.0500	0.371	0.3710	1.8500	1.8500	ND	0.0500	0.1300	0.1300
3/6/2018	211	8.3	ND	0.0500	ND	0.1250	0.9270	0.9270	1.5500	1.5500	0.2600	0.2600
3/12/2018	279	7.4	ND	0.0500	ND	0.1250	0.4440	0.4440	0.1130	0.1130	ND	0.0500
3/18/2018	125	5.4	ND	0.0500	ND	0.1250	0.2560	0.2560	ND	0.0500	ND	0.0500
3/24/2018	146	7.7	ND	0.0500	ND	0.1250	0.2090	0.2090	ND	0.0500	0.1270	0.1270
3/30/2018	126	7.1	ND	0.0500	ND	0.1250	0.5750	0.5750	0.6040	0.6040	ND	0.0500
4/5/2018	96	5.6	ND	0.0500	ND	0.1250	0.2700	0.2700	0.3370	0.3370	0.5560	0.5560
4/11/2018	114	4.4	ND	0.0500	ND	0.1250	0.3620	0.3620	0.4940	0.4940	0.5740	0.5740
4/17/2018	144	9.7	ND	0.0500	ND	0.1250	0.1600	0.1600	ND	0.0500	0.1270	0.1270
4/23/2018	243	1.2	ND	0.0500	ND	0.1250	0.3330	0.3330	1.3800	1.3800	0.3610	0.3610
4/29/2018	106	5.5	ND	0.0500	ND	0.1250	0.080	0.080	ND	0.0500	ND	0.0500
5/5/2018	320	3.5	ND	0.0500	ND	0.1250	0.1030	0.1030	ND	0.0500	ND	0.0500
5/11/2018	122	9.1	ND	0.0500	ND	0.1250	0.1170	0.1170	ND	0.0500	ND	0.0500
5/17/2018	159	6.0	ND	0.0500	ND	0.1250	0.1250	0.1250	ND	0.0500	ND	0.0500
5/23/2018	96	5.2	*	*	*	*	*	*	*	*	*	*
5/29/2018	144	5.2	ND	0.0500	ND	0.1250	0.1380	0.1380	ND	0.0500	0.1160	0.1160
6/4/2018	169	4.4	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	0.0500	0.1160	0.1160
6/10/2018	140	8.8	ND	0.0500	ND	0.1250	0.1450	0.1450	ND	0.0500	0.1030	0.1030
6/16/2018	114	8.9	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	0.0500	0.3220	0.3220
6/22/2018	151	4.9	ND	0.0500	ND	0.1250	0.1790	0.1790	ND	0.0500	0.1330	0.1330
6/28/2018	143	7.0	ND	0.0500	ND	0.1250	0.1490	0.1490	ND	0.0500	0.1930	0.1930
7/4/2018	126	7.1	*	*	*	*	*	*	*	*	*	*
7/10/2018	121	4.6	ND	0.0500	ND	0.1250	0.2370	0.2370	ND	0.0500	ND	0.0500
7/16/2018	153	5.9	ND	0.0500	ND	0.1250	0.2580	0.2580	ND	0.0500	0.1030	0.1030
7/22/2018	176	5.7	ND	0.0500	ND	0.1250	0.1080	0.1080	ND	0.0500	0.1330	0.1330
7/28/2018	133	4.0	ND	0.0500	ND	0.1250	0.1810	0.1810	ND	0.0500	ND	0.0500
8/3/2018	107	4.1	ND	0.0500	ND	0.1250	0.2720	0.2720	1.6000	1.6000	0.1470	0.1470
8/9/2018	138	5.6	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	0.0500	0.1350	0.1350

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - FORMOSA TRAINING COMPLEX

SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	Ethylene	1,3 Butadiene	Benzene	Vinyl Chloride	Ethylene Dichloride
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)
8/17/2018	135	6.0	ND	0.0500	ND	0.1250	0.2690
8/21/2018	155	5.4	ND	0.0500	ND	0.1250	0.2690
8/29/2018	121	4.3	ND	0.0500	ND	0.1250	ND
9/6/2018	91	1.8	ND	0.0500	ND	0.1250	0.0500
9/12/2018	60	4.6	ND	0.0500	ND	0.1250	0.1020
9/18/2018	187	1.3	*	*	*	*	0.1140
9/24/2018	115	4.5	ND	0.0500	ND	0.1250	*
9/30/2018	67	3.3	ND	0.0500	ND	0.1250	ND
						0.6890	0.0500
						0.6890	0.0500
						2.7400	0.0500
						2.7400	2.2600

ETHYLENE		1,3 BUTADIENE		BENZENE		VINYLCHLORIDE		ETHYLENE DICHLORIDE	
Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD	Actual	1/2 Reported LOD
0.1860	2.5860	4.7910	10.5410	12.9220	13.3220	14.6920	16.2420	13.5270	14.3770
0.0038	0.0528	0.0978	0.2151	0.2637	0.2719	0.2998	0.3115	0.2720	0.2934
0.0000	0.0500	0.0000	0.1250	0.1661	0.1776	0.2678	0.3082	0.2584	0.2757

Number of theoretical sample periods
Number of non operational sample periods

* - non operational data from the North site was used for Wind Direction and Wind Speed, if available

TEQ Air Monitoring Comparison Values (ppb)			Investigation
Chemical	ST	LT	Limit (ppb)
Vinyl Chloride	27,000	0.47	25
Ethylene Dichloride	94	0.72	29.7
Benzene	180	1.4	28.2
Ethylene	500,000	30	500
1,3 Butadiene	1,700	9	25

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - FORMOSA TRAINING COMPLEX
DUPLICATE SAMPLE SCHEDULE

SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	EthylenE	1,3 BUTADIENE	BENZENE	VINYL CHLORIDE	EthylenE DICHLORIDE
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)
10/27/17	224	6.0	ND	0.0500	ND	0.0500	ND
10/27/17d	224	6.0	ND	0.0500	ND	0.0500	ND
Relative Percent Difference (RPD)		ND			ND	ND	ND
11/08/17	222	7.9	ND	0.0500	2.1600	0.1490	0.8870
11/08/17d	222	7.9	ND	0.0500	ND	0.1590	0.7850
Relative Percent Difference (RPD)		ND		178.1182	-6.4935		12.2010
12/08/17	257	3.5	ND	0.0500	ND	0.1250	0.1490
12/08/17d	257	3.5	ND	0.0500	ND	0.1250	0.1490
Relative Percent Difference (RPD)		ND			ND	0.1950	ND
02/04/18	197	5.2	ND	0.0500	ND	0.1250	0.1340
02/04/18d	197	5.2	ND	0.0500	ND	0.1250	0.1340
Relative Percent Difference (RPD)		ND			ND	0.1950	ND
03/06/18	211	8.3	ND	0.0500	ND	0.1250	0.4520
03/06/18d	211	8.3	ND	0.0500	ND	0.1250	0.4520
Relative Percent Difference (RPD)		ND			ND	0.8140	0.2290
07/22/18	176	5.7	ND	0.0500	ND	0.1250	0.9270
07/22/18d	176	5.7	ND	0.0500	ND	0.1250	0.9270
Relative Percent Difference (RPD)		ND			ND	0.9640	0.1430
08/09/18	138	5.6	ND	0.0500	ND	0.1250	0.1080
08/09/18d	138	5.6	ND	0.0500	ND	0.1250	0.1080
Relative Percent Difference (RPD)		ND			ND	0.1190	0.1430
09/12/18	60	4.6	ND	0.0500	ND	0.1250	0.0500
09/12/18d	60	4.6	ND	0.0500	ND	0.1250	0.0500
Relative Percent Difference (RPD)		ND			ND	ND	ND

d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

* - Non operational, data from the North site was used for Wind Direction and Wind Speed, if available

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - PARK SITE

SAMPLE DATE	AVG WIND DIRECTION (Degrees)	AVG WIND SPEED (mph)	ETHYLENE	1,3 BUTADIENE	BENZENE	VINYL CHLORIDE	ETHYLENE DICHLORIDE
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)
10/3/2017	83	6.2	ND	0.0500	ND	0.0500	1.0200
10/9/2017	130	6.3	ND	0.0500	ND	0.0500	2.4900
10/15/2017	241	4.6	ND	0.0500	ND	0.0500	0.1550
10/21/2017	115	6.0	ND	0.0500	ND	0.0500	0.0500
10/27/2017	224	6.0	ND	0.0500	ND	0.0500	0.0500
11/2/2017	153	5.6	*	*	*	*	*
11/8/2017	222	7.9	ND	0.0500	ND	0.1250	*
11/14/2017	89	5.0	ND	0.0500	ND	0.1250	ND
11/20/2017	72	4.3	ND	0.0500	ND	0.1250	ND
11/26/2017	103	2.6	ND	0.1000	ND	0.2500	1.5000
12/2/2017	97	4.1	ND	0.0500	ND	0.1250	1.7600
12/8/2017	257	3.5	ND	0.0500	ND	0.1250	0.5950
12/14/2017	218	2.2	ND	0.0500	ND	0.1250	0.0500
12/18/2017	128	2.2	ND	0.0500	ND	0.1250	0.2810
12/26/2017	196	4.1	*	*	*	*	ND
1/2/2018	71	5.0	*	*	*	*	*
1/1/2018	202	8.9	*	*	*	*	*
1/17/2018	311	4.2	*	*	*	*	*
1/23/2018	275	4.0	ND	0.0500	ND	0.1250	*
1/29/2018	341	5.6	ND	0.0500	ND	0.1250	*
2/4/2018	197	5.2	ND	0.0500	ND	0.1250	*
2/10/2018	218	3.8	ND	0.0500	ND	0.1250	*
2/16/2018	147	5.1	ND	0.0500	ND	0.1250	*
2/22/2018	315	6.2	ND	0.0500	ND	0.1250	*
2/28/2018	145	10.1	ND	0.0500	ND	0.1250	*
3/6/2018	211	8.3	ND	0.0500	ND	0.1250	*
3/12/2018	279	7.4	ND	0.0500	ND	0.1250	*
3/18/2018	125	5.4	ND	0.0500	ND	0.1250	*
3/24/2018	146	7.7	ND	0.0500	ND	0.1250	*
3/30/2018	126	7.1	ND	0.0500	ND	0.1250	*
4/5/2018	96	5.6	ND	0.0500	ND	0.1250	*
4/11/2018	114	4.4	ND	0.0500	ND	0.1250	*
4/17/2018	144	9.7	ND	0.0500	ND	0.1250	*
4/23/2018	243	1.2	ND	0.0500	ND	0.1250	*
4/29/2018	106	5.5	ND	0.0500	ND	0.1250	*
5/5/2018	320	3.5	ND	0.0500	ND	0.1250	*
5/11/2018	122	9.1	ND	0.0500	ND	0.1250	*
5/17/2018	159	6.0	ND	0.0500	ND	0.2500	*
5/23/2018	96	5.2	*	*	*	*	*
5/29/2018	144	5.2	ND	0.0500	ND	0.1250	*
6/4/2018	169	4.4	ND	0.0500	ND	0.1250	*
6/10/2018	140	8.8	ND	0.0500	ND	0.1250	*
6/16/2018	114	8.9	ND	0.0500	ND	0.0500	*
6/22/2018	151	4.9	ND	0.0500	ND	0.1250	*
6/28/2018	143	7.0	ND	0.0500	ND	0.1250	*

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - PARK SITE

SAMPLE DATE	AVG WIND DIRECTION (Degrees)	AVG WIND SPEED (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
7/4/2018	126	7.1	ND	0.0500	ND	0.1250	0.3940	0.3940	ND	1.0300	ND	0.0500
7/10/2018	121	4.6	ND	0.0500	ND	0.1250	0.1750	0.1750	ND	0.0500	ND	0.0500
7/16/2018	153	5.9	ND	0.0500	ND	0.1250	0.1600	0.1600	ND	0.0500	0.1010	0.1010
7/22/2018	176	5.7	ND	0.0500	ND	0.1250	0.1020	0.1020	ND	0.0500	ND	0.0500
7/28/2018	133	4.0	ND	0.0500	ND	0.1250	0.2490	0.2490	ND	0.2380	0.6500	0.6500
8/3/2018	107	4.1	ND	0.0500	ND	0.1250	0.3470	0.3470	ND	1.1700	ND	0.6730
8/9/2018	138	5.6	ND	0.0500	ND	0.1250	ND	ND	ND	0.0500	ND	0.0500
8/17/2018	135	6.0	ND	0.0500	ND	0.1250	0.1150	0.1150	ND	0.0500	ND	0.0500
8/21/2018	155	5.4	ND	0.0500	ND	0.2500	ND	ND	ND	0.0500	ND	0.0500
8/29/2018	121	4.3	ND	0.0500	ND	0.1250	0.1940	0.1940	ND	0.0500	0.1040	0.1040
9/6/2018	91	1.8	ND	0.0500	ND	0.1250	0.1080	0.1080	ND	0.3670	0.3670	0.1590
9/12/2018	60	4.6	*	*	*	*	*	*	*	*	*	*
9/18/2018	187	1.3	ND	0.0500	ND	0.1250	0.5080	0.5080	ND	0.0500	0.3570	0.3570
9/24/2018	115	4.5	*	*	*	*	*	*	*	*	*	*
9/30/2018	65	2.2	*	*	*	*	*	*	*	*	*	*

Chemical	ST	L.T	Investigation		
			Limit (ppb)		
Vinyl Chloride	27,000	0.47	25		
Ethylene Dichloride	94	0.72	29.7		
Benzene	180	1.4	28.2		
Ethylene	500,000	30	500		
1,3 Butadiene	1,700	9	25		

Number of theoretical sample periods
Number of non-operational sample periods

* = non operational, data from the North site was used for Wind Direction and Wind Speed, if available

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - PARK SITE
DUPLICATE SAMPLE SCHEDULE

SAMPLE DATE	Avg Wind Direction (Degrees)	Avg Wind Speed (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)						
11/14/17	89	5.0	ND	0.0500	ND	0.1250	0.4140	ND	0.0500	ND	0.0500	ND
11/14/17 ^d	89	5.0	ND	0.0500	ND	0.1250	0.2640	ND	0.0500	ND	0.0500	ND
Relative Percent Difference (RPD)			ND		ND		44.2478		ND		ND	
11/26/17	103	2.6	ND	0.0000	ND	0.2500	0.3020	1.8100	1.8100	1.7600	1.7600	
11/26/17 ^d	103	2.6	ND	0.0500	ND	0.1250	0.2690	1.7500	1.7500	1.7500	1.7500	
Relative Percent Difference (RPD)			ND		ND		11.5587		3.3708		0.5698	
12/14/17	218	2.2	ND	0.0500	ND	0.1250	0.3610	0.3610	0.9360	0.2810	0.2810	
12/14/17 ^a	218	2.2	0.6320	0.6520	ND	0.1250	0.3540	0.3540	0.4030	0.4030	ND	0.0500
Relative Percent Difference (RPD)			-171.5100		ND		1.9580		79.6117		139.5770	
01/23/18	275	4.0	ND	0.0500	ND	0.1250	0.4990	0.4990	0.7540	0.7540	ND	0.0500
01/23/18 ^a	275	4.0	ND	0.5000	ND	0.1250	0.5020	0.5020	0.7230	0.7230	ND	0.0500
Relative Percent Difference (RPD)			ND		ND		-0.5994		4.1977		ND	
02/28/18	145	10.1	ND	0.0500	ND	0.1250	1.0400	1.0400	ND	0.0500	0.0500	0.0500
02/28/18 ^a	145	10.1	ND	0.0500	ND	0.1250	1.1200	1.1200	ND	0.0500	0.1440	0.1440
Relative Percent Difference (RPD)			ND		ND		-7.4074		ND		-31.3253	
07/28/18	133	4.0	ND	0.0500	ND	0.1250	0.2490	0.2490	0.2380	0.2380	0.6500	0.6500
07/28/18 ^d	133	4.0	ND	0.0500	ND	0.1250	0.2500	0.2500	0.2350	0.2350	0.6380	0.6380
Relative Percent Difference (RPD)			ND		ND		-0.4008		1.2685		1.8634	
08/29/18	121	4.3	ND	0.0500	ND	0.1250	0.1940	0.1940	ND	0.0500	0.1040	0.1040
08/29/18 ^d	121	4.3	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	0.1080	0.1080
Relative Percent Difference (RPD)			ND		ND		118.0328		ND		-3.7736	
09/18/18	187	1.3	ND	0.0500	ND	0.1250	0.5080	0.5080	ND	0.0500	0.3570	0.3570
09/18/18 ^a	187	1.3	ND	0.0500	ND	0.1250	0.5940	0.5940	ND	0.0500	0.2820	0.2820
Relative Percent Difference (RPD)			ND		ND		-15.6080		ND		23.4742	

^d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
PC PLANT SITE

SAMPLE DATE	AVG WIND DIRECTION (Degrees)	AVG WIND SPEED (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
10/1/2017	113	3.2	ND	0.0500	ND	0.1250	0.3060	1.3800	ND	0.2540	ND	2.5400
10/3/2017	83	6.2	ND	0.0500	ND	0.1250	0.0500	0.8860	ND	0.4300	ND	2.4300
10/5/2017	84	5.0	ND	0.0500	ND	0.1250	0.1280	ND	0.0500	ND	ND	0.0500
10/7/2017	268	2.6	*	*	*	*	*	*	*	*	*	*
10/9/2017	130	6.3	ND	0.0500	ND	0.1250	0.0500	0.1800	0.1800	0.3450	ND	ND
10/11/2017	231	5.9	ND	0.0500	0.3180	0.3180	0.5610	0.4280	0.4280	ND	ND	0.0500
10/13/2017	111	3.1	ND	0.0500	ND	0.1250	0.2690	0.2690	0.1670	0.1670	0.3590	0.3590
10/15/2017	241	4.6	*	*	*	*	*	*	*	*	*	*
10/17/2017	229	2.0	*	*	*	*	*	*	*	*	*	*
10/19/2017	71	4.7	ND	0.0500	ND	0.1250	0.0500	0.2830	0.2830	0.5600	0.5600	0.95600
10/21/2017	115	6.0	ND	0.0500	ND	0.1250	0.0500	ND	0.0500	ND	ND	0.0500
10/23/2017	137	1.8	*	*	*	*	*	*	*	*	*	*
10/25/2017	227	2.0	ND	0.0500	ND	0.1250	0.2470	0.2470	ND	0.0500	ND	0.0500
10/27/2017	224	6.0	ND	0.0500	ND	0.1250	0.1430	0.1430	0.1290	0.1290	ND	0.0500
10/29/2017	163	1.5	ND	0.0500	ND	0.1250	0.1740	0.1740	ND	0.0500	0.1560	0.1560
10/31/2017	106	3.2	ND	0.0500	ND	0.1250	0.5430	0.5430	0.1700	0.1700	1.3200	1.3200
11/2/2017	153	5.6	ND	0.0500	ND	0.1250	0.1230	0.1230	ND	0.0500	ND	0.0500
11/4/2017	128	4.9	ND	0.0500	ND	0.1250	0.0500	ND	0.0500	ND	ND	0.0500
11/6/2017	157	6.4	ND	0.0500	ND	0.1250	0.0500	ND	0.0500	ND	ND	0.0500
11/8/2017	222	7.9	ND	0.0500	0.6810	0.6810	0.7560	0.7560	1.1200	1.1200	ND	0.0500
11/10/2017	140	2.1	ND	0.0500	ND	0.1250	0.6440	0.6440	ND	0.0500	1.4500	1.4500
11/12/2017	70	5.0	ND	0.0500	ND	0.1250	0.1670	0.1670	0.9230	0.9230	3.6900	3.6900
11/14/2017	89	5.0	ND	0.1000	ND	0.2500	0.3140	0.3140	0.9990	0.9990	3.5400	3.5400
11/16/2017	107	4.9	*	*	*	*	*	*	*	*	*	*
11/18/2017	219	6.1	ND	0.0500	ND	0.1250	0.8410	0.8410	ND	0.0500	ND	0.0500
11/20/2017	72	4.3	ND	0.0500	ND	0.1250	0.0500	ND	0.0500	ND	ND	0.0500
11/22/2017	235	7.1	*	*	*	*	*	*	*	*	*	*
11/24/2017	138	2.5	*	*	*	*	*	*	*	*	*	*
11/26/2017	103	2.6	ND	0.0500	ND	0.1250	0.4570	0.4570	1.8200	1.8200	5.2200	5.2200
11/28/2017	98	4.2	ND	0.0500	ND	0.1250	0.3590	0.3590	ND	0.0500	0.2460	0.2460
11/30/2017	163	0.7	ND	0.0500	ND	0.1250	0.3680	0.3680	1.2400	1.2400	2.3800	2.3800
12/2/2017	97	4.1	ND	0.0500	ND	0.1250	0.3300	0.3300	ND	0.0500	0.1180	0.1180
12/4/2017	135	5.5	ND	0.0500	ND	0.1250	0.0500	ND	0.0500	ND	ND	0.0500
12/6/2017	186	6.3	ND	0.0500	ND	0.1250	0.4570	0.4570	0.7390	0.7390	ND	0.0500
12/8/2017	257	3.5	ND	0.0500	ND	0.1250	0.1300	0.1300	ND	0.0500	ND	0.0500
12/10/2017	234	1.5	ND	0.0500	ND	0.1250	0.0500	0.0500	0.3590	0.3590	ND	0.0500
12/12/2017	228	4.3	ND	0.0500	ND	0.1250	0.3600	0.3600	0.4160	0.4160	ND	0.0500
12/14/2017	218	2.2	ND	0.0500	ND	0.1250	0.6800	0.6800	0.6140	0.6140	0.3540	0.3540
12/16/2017	40	2.3	ND	0.0500	ND	0.1250	0.7680	0.7680	ND	0.0500	ND	0.0500
12/18/2017	128	2.0	ND	0.0500	ND	0.1250	0.3080	0.3080	0.7380	0.7380	0.2990	0.2990
12/20/2017	228	3.1	ND	0.0500	ND	0.1250	0.4090	0.4090	0.4890	0.4890	1.1700	1.1700
12/22/2017	157	5.5	ND	0.0500	ND	0.1250	0.2620	0.2620	ND	0.0500	ND	0.0500
12/24/2017	220	3.3	ND	0.0500	ND	0.1250	0.0500	ND	0.0500	ND	ND	0.0500
12/26/2017	196	4.1	ND	0.0500	ND	0.1250	0.5560	0.5560	1.0000	1.0000	0.9170	0.9170
12/28/2017	218	6.3	ND	0.0500	ND	0.1250	0.4520	0.4520	0.9800	0.9800	ND	0.0500
12/30/2017	270	3.1	ND	0.0500	ND	0.1250	0.2910	0.2910	0.2980	0.2980	ND	0.0500
1/1/2018	345	8.7	ND	0.0500	ND	0.1250	0.4340	0.4340	0.1340	0.1340	ND	0.0500
1/3/2018	289	5.1	ND	0.0500	ND	0.1250	0.1280	0.1280	0.0500	0.0500	ND	0.0500
1/5/2018	71	5.0	*	*	*	*	*	*	*	*	*	*
1/7/2018	119	5.7	ND	0.0500	ND	0.1250	0.1080	0.1080	ND	0.0500	ND	0.0500
1/9/2018	146	5.6	ND	0.0500	ND	0.1250	0.2570	0.2570	1.1000	1.1000	0.3910	0.3910

FORMOSA VOC CANISTER ANALYSIS
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SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
1/11/2018	202	8.9	ND	0.0500	ND	0.1250	0.1960	ND	0.0500	0.7240	0.7240	
1/13/2018	245	6.9	ND	0.0500	ND	0.1250	0.9340	1.5400	1.5400	1.7900	1.7900	
1/15/2018	89	5.9	ND	0.0500	ND	0.1030	0.1030	ND	0.0500	0.1370	0.1370	
1/17/2018	311	4.2	ND	0.0500	ND	0.1250	1.2900	1.0200	1.0200	0.1850	0.1850	
1/19/2018	94	7.9	ND	0.0500	ND	0.1250	0.5730	2.6500	2.6500	2.6000	2.6000	
1/21/2018	126	7.5	ND	0.0500	ND	0.1250	ND	0.0500	ND	ND	ND	
1/23/2018	275	4.0	ND	0.0500	ND	0.1250	0.6400	0.4360	0.4360	0.3610	0.3610	
1/25/2018	114	6.3	10.5000	ND	0.7500	1.2400	1.2400	3.5900	3.5900	2.5100	2.5100	
1/27/2018	121	4.4	5.4500	ND	0.7500	1.5600	1.5600	1.6800	1.6800	6.9100	6.9100	
1/29/2018	341	5.6	ND	0.0500	ND	0.1250	0.8390	0.8390	1.0400	1.0400	0.0500	
1/31/2018	131	5.9	ND	0.0500	ND	0.1250	0.3660	0.3660	ND	ND	0.0500	
2/2/2018	146	8.4	ND	0.0500	ND	0.1250	0.8700	0.8700	0.6390	0.6390	0.6030	
2/4/2018	197	5.2	*	*	*	*	*	*	*	*	*	
2/6/2018	102	6.0	ND	0.0500	ND	0.1250	0.2270	0.2270	0.2520	0.2520	1.4000	
2/8/2018	268	5.0	ND	0.0500	ND	0.1250	0.9460	0.9460	1.0600	1.0600	0.2510	
2/10/2018	218	3.8	ND	0.0500	ND	0.1250	2.0700	2.0700	0.7500	0.7500	0.2350	
2/12/2018	248	8.7	ND	0.1000	ND	0.2500	0.9700	0.9700	0.9820	0.9820	ND	
2/14/2018	206	3.9	ND	0.0500	ND	0.1250	1.6800	1.6800	1.4900	1.4900	0.5790	
2/16/2018	147	5.1	ND	0.0500	ND	0.1250	0.2400	0.2400	0.1520	0.1520	ND	
2/18/2018	118	7.0	ND	0.0500	ND	0.1250	0.7060	0.7060	3.4300	3.4300	1.9200	
2/20/2018	115	9.6	ND	0.0500	0.3320	0.3320	0.1010	0.1010	ND	ND	0.0500	
2/22/2018	315	6.2	*	*	*	*	*	*	*	*	*	
2/24/2018	141	8.8	ND	0.0500	ND	0.1250	ND	ND	ND	ND	ND	
2/26/2018	156	8.2	ND	0.0500	ND	0.1250	0.1620	0.1620	ND	ND	0.0500	
2/28/2018	145	10.1	ND	0.0500	ND	0.1250	0.4650	0.4650	ND	ND	0.0500	
3/2/2018	159	8.1	ND	0.0500	ND	0.1250	1.2600	1.2600	1.5700	1.5700	1.6000	
3/4/2018	105	8.5	*	*	*	*	*	*	*	*	*	
3/6/2018	211	8.3	ND	0.0500	ND	0.1250	0.8900	0.8900	1.4700	1.4700	0.6650	
3/8/2018	69	7.6	0.9900	ND	0.0500	ND	0.1250	0.0500	4.6100	4.6100	2.3000	
3/10/2018	155	6.7	ND	0.0500	ND	0.1250	0.1790	0.1790	ND	ND	0.0500	
3/12/2018	279	7.4	*	*	*	*	*	*	*	*	*	
3/14/2018	150	5.1	ND	0.0500	ND	0.1250	1.0800	1.0800	4.8300	4.8300	0.5480	
3/16/2018	152	6.8	ND	0.0500	ND	0.1250	0.2110	0.2110	ND	ND	0.0500	
3/18/2018	125	5.4	ND	0.0500	ND	0.1250	0.1480	0.1480	ND	ND	0.0500	
3/20/2018	287	6.1	ND	0.0500	ND	0.1250	0.7890	0.7890	3.5800	3.5800	0.3810	
3/22/2018	102	7.8	ND	0.0500	ND	0.1250	0.3950	0.3950	ND	ND	0.0500	
3/24/2018	146	7.7	ND	0.0500	ND	0.1250	0.1390	0.1390	ND	ND	0.0500	
3/26/2018	124	10.2	ND	0.0500	ND	0.1250	0.1600	0.1600	ND	ND	0.0500	
3/28/2018	130	9.2	ND	0.0500	ND	0.1250	0.1480	0.1480	ND	ND	0.0500	
3/30/2018	126	7.1	ND	0.0500	ND	0.1250	0.2900	0.2900	0.4610	0.4610	0.1430	
4/1/2018	126	8.6	ND	0.0500	ND	0.1250	ND	0.0500	ND	ND	0.0500	
4/3/2018	140	7.3	ND	0.0500	ND	0.1250	0.1130	0.1130	ND	ND	0.0500	
4/5/2018	96	5.6	ND	0.0500	ND	0.1250	0.1540	0.1540	1.0500	1.0500	1.2200	
4/7/2018	331	4.7	ND	0.0500	ND	0.1250	0.2520	0.2520	0.1070	0.1070	ND	
4/9/2018	32	5.1	2.5800	ND	0.0500	ND	0.0500	0.4920	4.9200	2.4400	2.4400	
4/11/2018	114	4.4	ND	0.0500	ND	0.1250	0.2320	0.2320	0.2140	0.2140	0.4920	
4/13/2018	142	10.2	ND	0.0500	ND	0.1250	0.3520	0.3520	0.1640	0.1640	ND	
4/15/2018	305	3.0	ND	0.0500	ND	0.1250	0.1650	0.1650	ND	ND	0.0500	
4/17/2018	144	9.7	ND	0.0500	ND	0.1250	0.1840	0.1840	0.4210	0.4210	0.1940	
4/19/2018	48	3.3	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	ND	0.0500	
4/21/2018	108	6.4	ND	0.0500	ND	0.1250	0.1840	0.1840	ND	ND	0.0500	

FORMOSA VOC CANISTER ANALYSIS
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PC PLANT SITE

SAMPLE DATE	AVG. WIND DIRECTION (Degrees)	AVG. WIND SPEED (mph)	ETHYLENE		1,3-BUTADIENE		BENZENE		VINYL CHLORIDE		Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)				
4/23/2018	243	1.2	ND	0.0500	ND	0.1250	0.2550	2.1000	2.1000	0.3550	0.3550	ND	ND	
4/25/2018	124	3.5	ND	0.0500	ND	0.1250	0.3000	0.1980	0.1980	0.1260	0.1260	ND	ND	
4/27/2018	336	2.2	ND	0.0500	ND	0.1250	0.5380	2.2300	2.2300	0.2050	0.2050	ND	ND	
4/29/2018	106	5.5	*	*	*	*	*	*	*	*	*	*	*	
5/1/2018	113	9.8	ND	0.0500	ND	0.1250	0.1050	0.1050	ND	ND	ND	ND	ND	
5/3/2018	125	9.9	ND	0.0500	ND	0.1250	0.1230	ND	ND	0.0500	0.0500	ND	ND	
5/5/2018	320	3.5	ND	0.0500	ND	0.1250	0.2280	ND	ND	0.0500	0.0500	ND	ND	
5/7/2018	166	2.7	ND	0.0500	ND	0.1250	0.1160	ND	ND	0.0500	0.0500	ND	ND	
5/9/2018	126	6.5	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
5/11/2018	122	9.1	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
5/13/2018	115	7.9	ND	0.1000	ND	0.2500	0.9700	0.9820	0.9820	0.0000	0.0000	ND	ND	
5/15/2018	125	5.6	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
5/17/2018	159	6.0	ND	0.0500	ND	0.1250	0.1320	ND	ND	0.0500	0.0500	ND	ND	
5/19/2018	121	10.1	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
5/21/2018	117	3.9	ND	0.0500	ND	0.1250	0.1520	0.3580	0.3580	0.8050	0.8050	ND	ND	
5/23/2018	96	5.2	*	*	*	*	*	*	*	*	*	*	*	
5/25/2018	149	3.0	ND	0.0500	ND	0.1250	0.1160	ND	ND	0.0500	0.0500	ND	ND	
5/27/2018	146	4.9	*	*	*	*	*	*	*	*	*	*	*	
5/29/2018	144	5.2	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
5/31/2018	128	8.8	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
6/2/2018	148	6.7	ND	0.0500	ND	0.1250	0.1020	ND	ND	0.0500	0.0500	ND	ND	
6/4/2018	169	4.4	ND	0.0500	ND	0.1250	0.1170	0.1170	0.1170	0.1390	0.1390	ND	ND	
6/6/2018	137	6.7	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
6/8/2018	121	7.2	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
6/10/2018	140	8.8	ND	0.0500	ND	0.1250	0.1930	0.1930	ND	0.0500	0.0500	ND	ND	
6/12/2018	126	8.8	ND	0.0500	ND	0.1250	0.1120	ND	ND	0.0500	0.0500	ND	ND	
6/14/2018	122	6.9	ND	0.0500	ND	0.1250	0.1490	ND	ND	0.0500	0.0500	ND	ND	
6/16/2018	114	8.9	*	*	*	*	*	*	*	*	*	*	*	
6/18/2018	99	4.8	ND	0.0500	ND	0.1250	0.1120	0.6960	0.6960	1.8400	1.8400	ND	ND	
6/20/2018	105	5.3	ND	0.0500	ND	0.1250	0.1230	0.1230	0.3960	0.3960	0.6200	0.6200	ND	ND
6/22/2018	151	4.9	ND	0.0500	ND	0.1250	0.1560	ND	ND	0.0500	0.0500	ND	ND	
6/24/2018	131	8.8	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
6/26/2018	123	7.5	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
6/28/2018	143	7.0	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	0.0500	ND	ND	
6/30/2018	137	8.3	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
7/2/2018	140	5.3	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
7/4/2018	130	2.8	ND	0.5000	ND	1.2500	0.5000	ND	ND	0.5000	0.5000	ND	ND	
7/6/2018	208	0.7	ND	0.0500	ND	0.1250	0.3180	0.3180	0.1040	0.1040	0.3430	0.3430	ND	ND
7/8/2018	161	2.8	ND	0.0500	ND	0.1250	0.1930	0.1930	ND	ND	0.0500	0.0500	ND	ND
7/10/2018	121	4.6	ND	0.0500	ND	0.1250	0.3650	0.3650	ND	ND	0.0500	0.0500	ND	ND
7/12/2018	146	4.3	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
7/14/2018	138	6.1	ND	0.0500	ND	0.1250	0.1250	ND	ND	0.0500	0.0500	ND	ND	
7/16/2018	153	5.9	ND	0.0500	ND	0.1250	0.1080	0.1080	ND	ND	0.0500	0.0500	ND	ND
7/18/2018	164	5.6	ND	0.5000	ND	0.1250	0.1850	0.1850	ND	ND	0.0500	0.0500	ND	ND
7/20/2018	163	5.9	ND	0.0500	ND	0.1250	0.4950	0.4950	ND	ND	0.0500	0.0500	ND	ND
7/22/2018	176	5.7	ND	0.0500	ND	0.1250	0.4890	0.4890	ND	ND	0.0500	0.0500	ND	ND
7/24/2018	145	3.7	ND	0.0500	ND	0.1250	0.1390	0.1390	ND	ND	0.0500	0.0500	ND	ND
7/26/2018	143	3.1	ND	0.0500	ND	0.1250	0.2550	0.2550	ND	ND	0.0500	0.0500	ND	ND
7/28/2018	133	4.0	ND	0.0500	ND	0.1250	0.1870	0.1870	ND	ND	0.0500	0.0500	ND	ND
7/30/2018	156	3.9	ND	0.0500	ND	0.1250	0.0500	0.0500	ND	ND	0.0500	0.0500	ND	ND
8/1/2018	129	1.1	ND	0.0500	ND	0.1250	0.3900	0.3900	1.2300	1.2300	0.3580	0.3580	ND	ND

FORMOSA VOC CANISTER ANALYSIS
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PC PLANT SITE

SAMPLE DATE	AVG. WIND DIRECTION (Degrees)	AVG. WIND SPEED (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
8/3/2018	107	4.1	ND	0.0500	ND	0.1250	0.3420	0.7380	ND	0.7380	1.2800	1.2800
8/5/2018	101	6.5	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	ND	0.0500
8/7/2018	122	6.2	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	ND	0.0500
8/9/2018	138	5.6	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	ND	0.0500
8/11/2018	149	4.1	*	*	*	*	*	*	*	*	*	*
8/13/2018	134	7.7	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/15/2018	142	6.5	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/17/2018	135	6.0	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/19/2018	158	7.4	*	*	*	*	*	*	*	*	*	*
8/21/2018	155	5.4	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/23/2018	136	3.9	*	*	*	*	*	*	*	*	*	*
8/25/2018	125	5.9	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/27/2018	124	6.9	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/29/2018	121	4.3	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.0500	ND	0.0500
8/31/2018	106	4.0	*	*	*	*	*	*	*	*	*	*
9/2/2018	106	2.1	ND	0.0500	ND	0.1250	ND	0.0500	ND	0.1700	0.1700	0.1700
9/4/2018	69	4.6	ND	0.0500	ND	0.1250	0.1090	1.6600	ND	1.6600	1.9400	1.9400
9/6/2018	91	1.8	ND	0.0500	ND	0.1250	0.1680	0.1680	ND	0.6980	0.6670	0.6670
9/8/2018	120	4.8	ND	0.0500	ND	0.1250	0.1760	0.1760	0.1070	0.1070	0.1120	0.1120
9/10/2018	40	3.7	ND	0.0500	ND	0.1250	0.1680	0.1080	1.5300	1.5300	3.5800	3.5800
9/12/2018	60	4.6	ND	0.0500	ND	0.1250	0.1600	0.1600	2.0500	2.0500	3.3800	3.3800
9/14/2018	41	6.1	ND	0.0500	ND	0.1250	0.1550	0.1550	2.1800	2.1800	5.1700	5.1700
9/16/2018	122	1.9	ND	0.0500	ND	0.1250	0.2860	0.2860	0.5470	0.5470	0.8670	0.8670
9/18/2018	187	1.3	ND	0.0500	ND	0.1250	0.1320	0.1320	ND	0.0500	0.1420	0.1420
9/20/2018	121	5.9	ND	0.0500	ND	0.1250	0.0500	ND	ND	0.0500	ND	0.0500
9/22/2018	204	2.9	ND	0.0500	ND	0.1250	0.1510	0.1510	ND	0.0500	ND	0.0500
9/24/2018	115	4.5	ND	0.0500	ND	0.1250	0.1780	0.1780	ND	0.0500	ND	0.0500
9/26/2018	132	2.4	ND	0.0500	ND	0.1250	0.1510	0.1510	0.4270	0.4270	0.8060	0.8060
9/28/2018	62	2.9	ND	0.0500	ND	0.1250	0.0500	ND	1.6100	1.6100	1.9400	1.9400
9/30/2018	65	2.2	ND	0.0500	ND	0.1250	0.2190	0.2190	2.1300	2.1300	2.8200	2.8200

Chemical	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
Year-To-Date Sum	19,5200	29,8700	1,3310	25,2360	46,7460	49,9460	84,7200	89,6700	105,8490	110,1590
Rolling Year Average	0,1205	0,1844	0,0982	0,1556	0,2886	0,3083	0,5230	0,5535	0,6534	0,6802
Annual Average	0,0311	0,0973	0,0900	0,1401	*	0,1403	0,1650	0,3517	0,3943	0,5521

Number of theoretical sample periods
 Number of non operational sample periods

TCEQ Air Monitoring Comparison Values (ppb)			Investigation
Chemical	ST	LT	Limit (ppb)
Vinyl Chloride	27,000	0,47	25
Ethylene Dichloride	94	0,72	29,7
Benzene	180	1,4	28,2
Ethylene	500,000	30	500
1,3 Butadiene	1,700	9	25

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

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**FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - PC SITE
DUPLICATE SAMPLE SCHEDULE**

SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	ETHYLENE		1,3 BUTADIENE		BENZENE		VINYL CHLORIDE		ETHYLENE DICHLORIDE	
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
10/13/17	111	3.1	ND	0.0500	ND	0.1250	0.2690	0.2690	0.1670	0.1670	0.3590	0.3590
10/13/17 _a	111	3.1	ND	0.0500	ND	0.1250	0.2620	0.2620	0.1690	0.1690	0.3670	0.3670
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	2.6365	ND	-1.1905	-1.1905	-2.2039	-2.2039
10/19/17	71	4.7	ND	0.5000	ND	1.2500	ND	0.5000	2.8300	2.8300	9.5600	9.5600
10/19/17 _a	71	4.7	ND	0.5000	ND	1.2500	ND	0.5000	2.8700	2.8700	9.5930	9.5930
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	ND	ND	-1.4035	-1.4035	-3.7968	-3.7968
10/31/17	106	3.2	ND	0.0500	ND	0.1250	0.5430	0.5430	0.1700	0.1700	1.3200	1.3200
10/31/17 _a	106	3.2	ND	0.0500	ND	0.1250	0.5250	0.5250	0.1710	0.1710	1.3100	1.3100
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	3.3708	ND	-0.5865	-0.5865	0.7605	0.7605
11/08/17	222	7.9	ND	0.0500	0.6810	0.6810	0.7560	0.7560	1.1200	1.1200	ND	ND
11/08/17 _a	222	7.9	ND	0.0500	ND	0.1250	1.2200	1.2200	ND	0.0500	ND	ND
Relative Percent Difference (RPD)		ND	ND	137.9653	ND	ND	-46.9636	ND	182.9060	182.9060	ND	ND
11/14/17	89	5.0	ND	0.1000	ND	0.2500	0.3140	0.3140	0.9990	0.9990	3.5400	3.5400
11/14/17 _a	89	5.0	*	*	*	*	*	*	*	*	*	*
Relative Percent Difference (RPD)		*	*	*	*	*	*	*	*	*	*	*
11/30/17	163	0.7	ND	0.0500	ND	0.1250	0.3680	0.3680	1.2400	1.2400	2.3800	2.3800
11/30/17 _a	163	0.7	ND	0.0500	ND	0.1250	0.3190	0.3190	1.2600	1.2600	2.1800	2.1800
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	14.2649	ND	-1.6000	-1.6000	8.7719	8.7719
12/06/17	186	6.3	ND	0.0500	ND	0.1250	0.4570	0.4570	0.7390	0.7390	ND	ND
12/06/17 _a	186	6.3	ND	0.0500	ND	0.1250	0.4610	0.4610	1.1200	1.1200	ND	ND
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	-0.8715	ND	-46.9898	-46.9898	ND	ND
12/12/17	228	4.3	ND	0.0500	ND	0.1250	0.3600	0.3600	0.4160	0.4160	ND	ND
12/12/17 _a	228	4.3	ND	0.0500	ND	0.1250	0.3230	0.3230	0.3347	0.3347	ND	ND
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	10.8346	ND	18.0865	18.0865	ND	ND
12/16/17	40	2.3	ND	0.0500	ND	0.1250	0.7680	0.7680	ND	0.0500	ND	ND
12/16/17 _a	40	2.3	ND	0.0500	ND	0.1250	0.2040	0.2040	0.7850	0.7850	1.7600	1.7600
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	116.0494	ND	-176.0479	-176.0479	-188.9503	-188.9503
12/22/17	157	5.5	ND	0.0500	ND	0.1250	0.2620	0.2620	ND	0.0500	ND	ND
12/22/17 _a	157	5.5	*	*	*	*	*	*	*	*	*	*
Relative Percent Difference (RPD)		*	*	*	*	*	*	*	*	*	*	*
01/09/18	146	5.6	ND	0.0500	ND	0.1250	1.1000	1.1000	0.2570	0.2570	0.3910	0.3910
01/09/18 _a	146	5.6	ND	0.0500	ND	0.1250	1.2000	1.2000	0.2780	0.2780	0.6330	0.6330
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	-8.6957	ND	-7.8505	-7.8505	-47.2656	-47.2656
01/15/18	89	5.9	ND	0.0500	ND	0.1250	0.1030	0.1030	ND	0.0500	0.1370	0.1370
01/15/18 _a	89	5.9	*	*	*	*	*	*	*	*	*	*
Relative Percent Difference (RPD)		*	*	*	*	*	*	*	*	*	*	*
01/27/18	121	4.4	ND	0.4500	ND	0.1250	0.6400	0.6400	0.4260	0.4260	0.3610	0.3610
01/27/18 _a	121	4.4	ND	0.4500	ND	0.1250	0.6770	0.6770	0.9880	0.9880	0.3680	0.3680
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	-5.6188	ND	-77.5281	-77.5281	-1.9204	-1.9204
01/27/18	275	4.0	ND	0.4500	ND	0.1250	0.5600	0.5600	1.6800	1.6800	6.9100	6.9100
01/27/18 _a	275	4.0	ND	0.4500	ND	0.1250	0.7840	0.7840	0.9780	0.9780	4.5200	4.5200
Relative Percent Difference (RPD)		ND	ND	ND	ND	ND	66.2116	ND	52.8217	52.8217	41.8198	41.8198

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - PC SITE

DUPLICATE SAMPLE SCHEDULE

SAMPLE DATE	Avg Wind Direction (Degrees)	Avg Wind Speed (mph)	Ethylene (ppb)	1,3 Butadiene (ppb)	Benzene (ppb)	Vinyl Chloride (ppb)	Ethylene Dichloride (ppb)
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)
02/07/18	146	8.4	ND	0.0500	ND	0.1250	0.6390
02/07/18 _a	146	8.4	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
02/10/18	218	3.8	ND	0.0500	ND	0.1250	0.6390
02/10/18 _a	218	3.8	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
02/14/18	206	3.9	ND	0.0500	ND	0.1250	0.6390
02/14/18 _a	206	3.9	*	*	*	*	*
Relative Percent Difference (RPD)			*	*	*	*	*
02/24/18	141	8.8	ND	0.0500	ND	0.1250	0.6390
02/24/18 _a	141	8.8	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
03/04/18	105	8.5	*	*	*	*	*
03/04/18 _a	105	8.5	*	*	*	*	*
Relative Percent Difference (RPD)			*	*	*	*	*
03/10/18	155	6.7	ND	0.0500	ND	0.1250	0.6390
03/10/18 _a	155	6.7	*	*	*	*	*
Relative Percent Difference (RPD)			*	*	*	*	*
03/16/18	152	6.8	ND	0.0500	ND	0.1250	0.6390
03/16/18 _a	152	6.8	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
03/22/18	102	7.8	ND	0.0500	ND	0.1250	0.6390
03/22/18 _a	102	7.8	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
04/03/18	140	7.3	ND	0.0500	ND	0.1250	0.6390
04/03/18 _a	140	7.3	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
04/09/18	32	5.1	2.5800	ND	0.1250	0.1840	0.6390
04/09/18 _a	32	5.1	*	*	*	*	*
Relative Percent Difference (RPD)			*	*	*	*	*
04/17/18	144	9.7	ND	0.5000	ND	0.1250	0.6390
04/17/18 _a	144	9.7	ND	0.5000	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
04/21/18	108	6.4	ND	0.0500	ND	0.1250	0.6390
04/21/18 _a	108	6.4	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
04/27/18	336	2.2	ND	0.0500	ND	0.1250	0.6390
04/27/18 _a	336	2.2	ND	0.0500	ND	0.1250	0.6390
Relative Percent Difference (RPD)			ND	ND	ND	ND	ND
05/03/18	125	9.9	ND	0.0500	ND	0.1250	0.6390
05/03/18 _a	125	9.9	*	*	*	*	*

FORMOSA VOC CANISTER ANALYSIS

3rd QUARTER 2018

POINT COMFORT - PC SITE

DUPPLICATE SAMPLE SCHEDULE

SAMPLE DATE	AVG. WIND DIRECTION (Degrees)	AVG. WIND SPEED (mph)	ETHYLENE	1,3 BUTADIENE	BENZENE	VINYL CHLORIDE	ETHYLENE DICHLORIDE
		Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)
	Relative Percent Difference (RPD)	*	*	*	*	*	*
05/11/18	122	9.1	ND	0.0500	ND	ND	ND
05/11/18 _a	122	9.1	ND	0.0500	ND	0.0500	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
05/15/18	125	5.6	ND	0.0500	ND	0.1250	ND
05/15/18 _a	125	5.6	ND	0.0500	ND	0.1250	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
05/31/18	128	8.8	ND	0.0500	ND	0.1250	ND
05/31/18 _a	128	8.8	ND	0.0500	ND	0.1410	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
06/08/18	121	7.2	ND	0.0500	ND	0.1250	ND
06/08/18 _a	121	7.2	ND	0.0500	ND	0.1250	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
06/14/18	122	6.9	ND	0.0500	ND	0.1250	ND
06/14/18 _a	122	6.9	ND	0.0500	ND	0.1250	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
06/20/18	105	5.3	ND	0.0500	ND	0.1250	ND
06/20/18 _a	105	5.3	*	*	*	*	*
	Relative Percent Difference (RPD)	*	*	*	*	*	*
06/26/18	123	7.5	ND	0.0500	ND	0.1250	ND
06/26/18 _a	123	7.5	ND	0.1000	ND	0.2500	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
07/04/18	130	2.8	ND	0.5000	ND	1.2500	ND
07/04/18 _a	130	2.8	ND	0.5000	ND	1.2500	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
07/08/18	161	2.8	ND	0.0500	ND	0.1250	ND
07/08/18 _a	161	2.8	*	*	*	*	*
	Relative Percent Difference (RPD)	*	*	*	*	*	*
07/14/18	138	6.1	ND	0.0500	ND	0.1250	ND
07/14/18 _a	138	6.1	ND	0.5000	ND	0.1250	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
07/20/18	163	5.9	ND	0.0500	ND	0.1250	ND
07/20/18 _a	163	5.9	ND	0.0500	ND	0.1250	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
07/26/18	143	3.1	ND	0.0500	ND	0.1250	ND
07/26/18 _a	143	3.1	ND	0.1000	ND	0.2500	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
08/01/18	129	1.1	ND	0.0500	ND	0.1250	ND
08/01/18 _a	129	1.1	ND	0.0500	ND	0.1250	ND
	Relative Percent Difference (RPD)	ND	ND	ND	ND	ND	ND
08/07/18	122	6.2	ND	0.0500	ND	0.1250	ND
08/07/18 _a	122	6.2	ND	0.0500	ND	0.1250	ND

FORMOSA VOC CANISTER ANALYSIS
3rd QUARTER 2018
POINT COMFORT - PC SITE
DUPLICATE SAMPLE SCHEDULE

SAMPLE DATE	Avg. Wind Direction (Degrees)	Avg. Wind Speed (mph)	Ethylene	1,3 Butadiene	Benzene	Vinyl Chloride	Ethylene Dichloride
			Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)	1/2 Reported LOD (ppb)	Actual (ppb)
08/07/18 _a	122	6.2	ND	0.0500	ND	0.0500	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500
08/15/18	142	6.5	ND	0.0500	ND	0.1250	ND
08/15/18 _a	142	6.5	ND	0.0500	ND	0.1250	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500
08/21/18	155	5.4	ND	0.0500	ND	0.1250	ND
08/21/18 _a	155	5.4	ND	0.0500	ND	0.1250	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500
08/25/18	125	5.9	ND	0.0500	ND	0.1250	ND
08/25/18 _a	125	5.9	ND	0.0500	ND	0.1250	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500
09/06/18	91	1.8	ND	0.0500	ND	0.1250	ND
09/06/18 _a	91	1.8	ND	0.0500	ND	0.1250	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500
09/12/18	60	4.6	ND	0.0500	ND	0.1250	ND
09/12/18 _a	60	4.6	ND	0.0500	ND	0.1250	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500
09/18/18	187	1.3	ND	0.0500	ND	0.1250	ND
09/18/18 _a	187	1.3	*	*	*	*	*
Relative Percent Difference (RPD)			*	*	*	*	*
09/26/18	132	2.4	ND	0.0500	ND	0.1250	ND
09/26/18 _a	132	2.4	ND	0.0500	ND	0.1250	ND
Relative Percent Difference (RPD)			ND	ND	ND	ND	0.0500

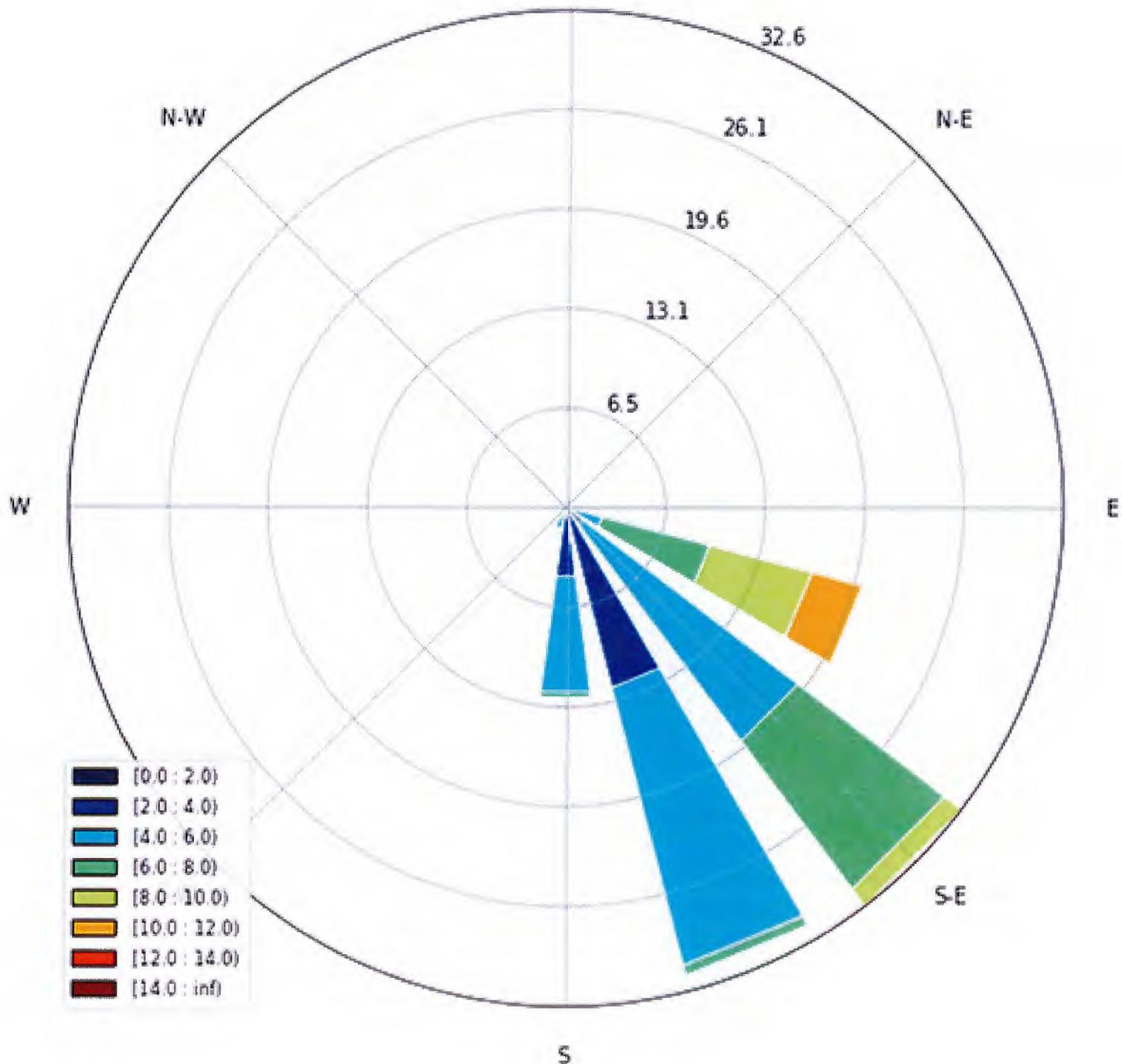
d - Duplicate sample taken in addition to the routine sample (See Calculation Methodology for information on inclusion of duplicate sample results.)

* - non operational, data from the North site was used for Wind Direction and Wind Speed, if available

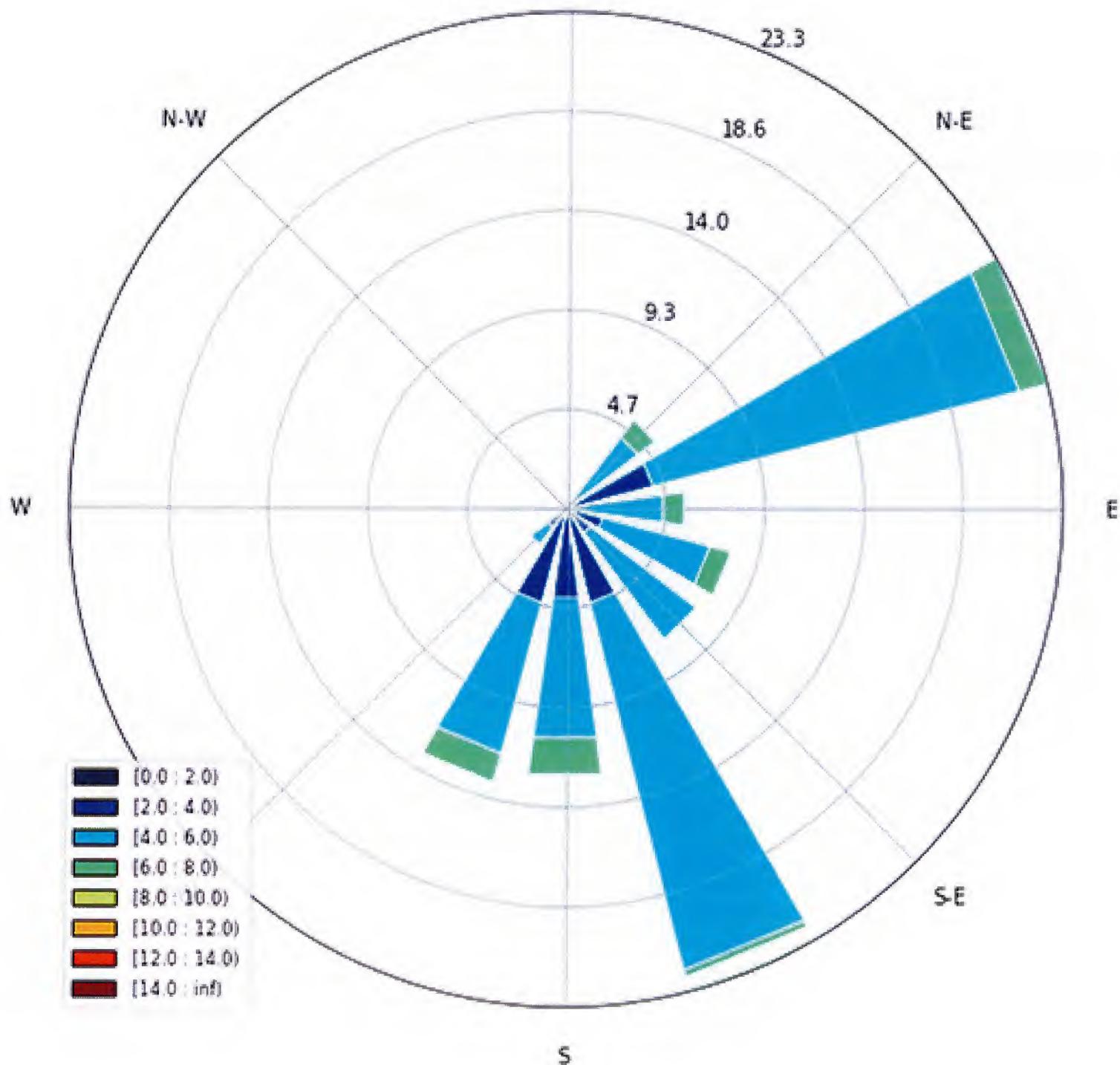
Summary of Non-operational Periods
3rd QUARTER 2018
Point Comfort SUMMA Canister System

SUMMA Site	Date (s)	Description of Problem	Corrective Action
Park	9/24/18 9/30/18	Unable to swap canister due to significantly high grass at Park Site.	
City Hall & Fornosa Training Complex	9/18/18	Samples did not run due unknown reasons.	AECOM was unable to verify the cause. Next run was successful.
PC	8/23/18	Samples did not run due to unknown reason.	AECOM was unable to verify the cause. Next run was successful.
PC	8/11/18	Sample leaked below 2.5 prior to run.	
Park	9/12/18	Voided sample due to low pressure.	Adjusted flow controller to decrease amount sampled.
PC	8/19/18 8/31/18	Voided sample due to high final pressure.	

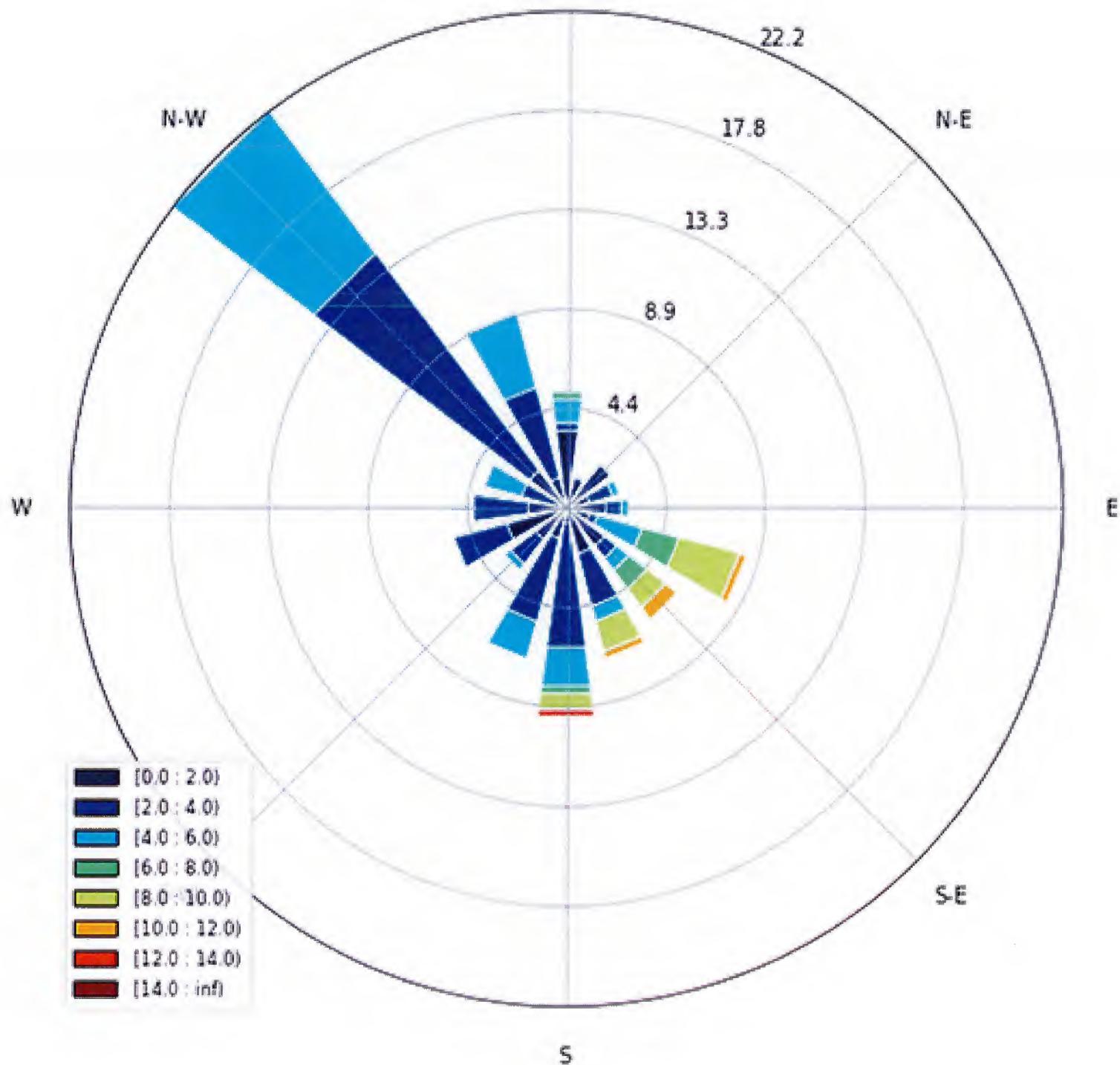
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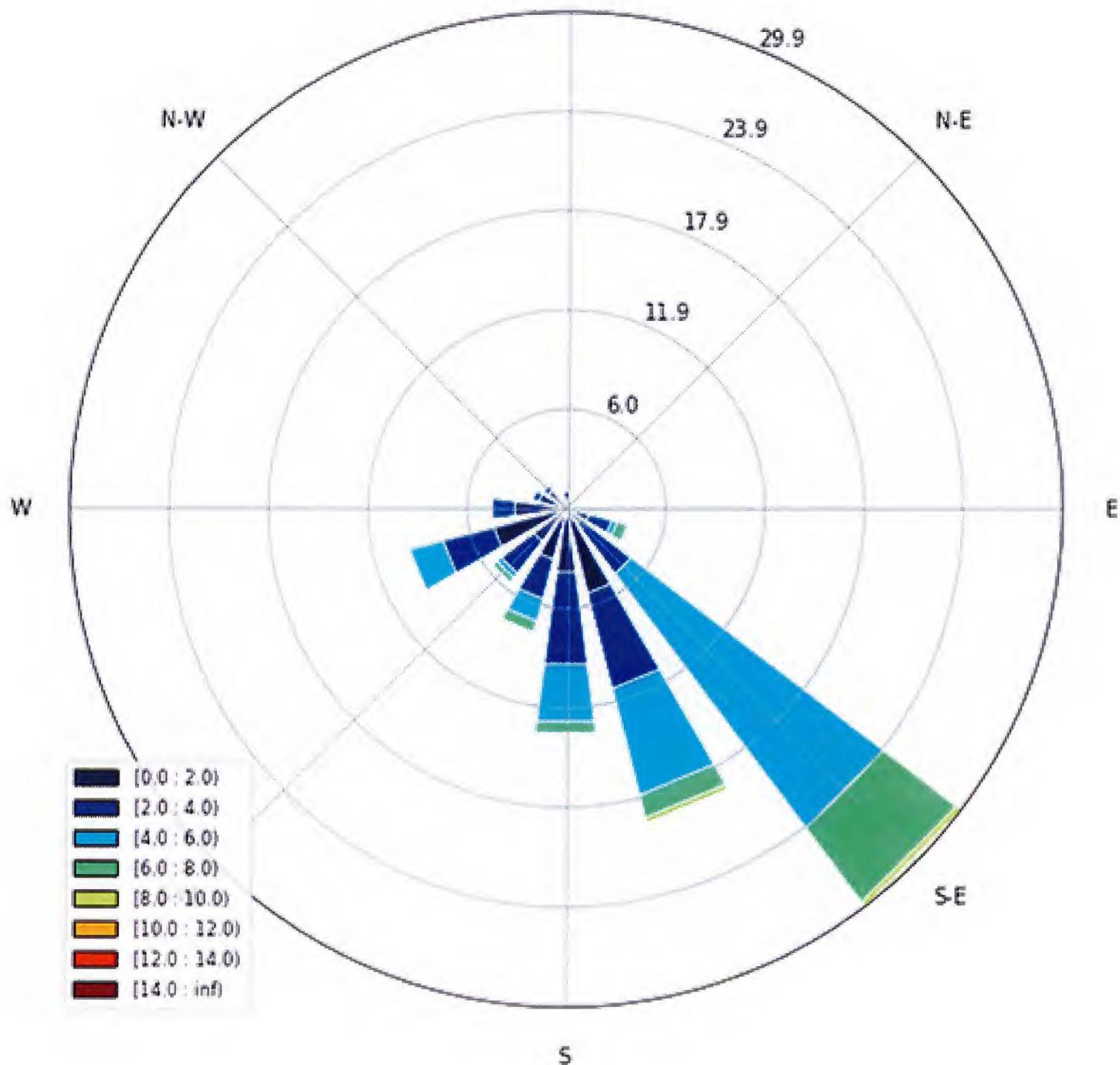
FPC: July 4 2018
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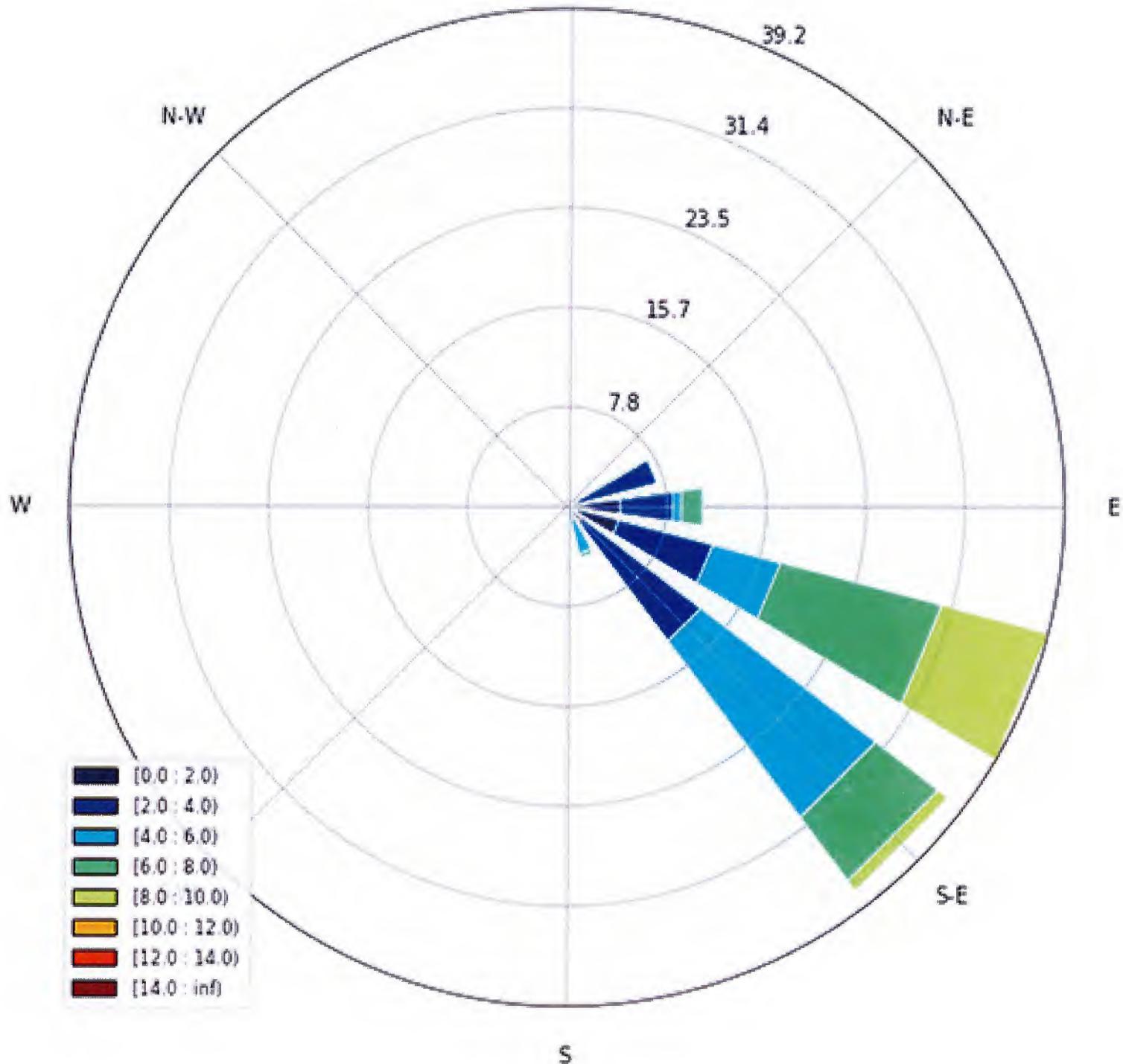
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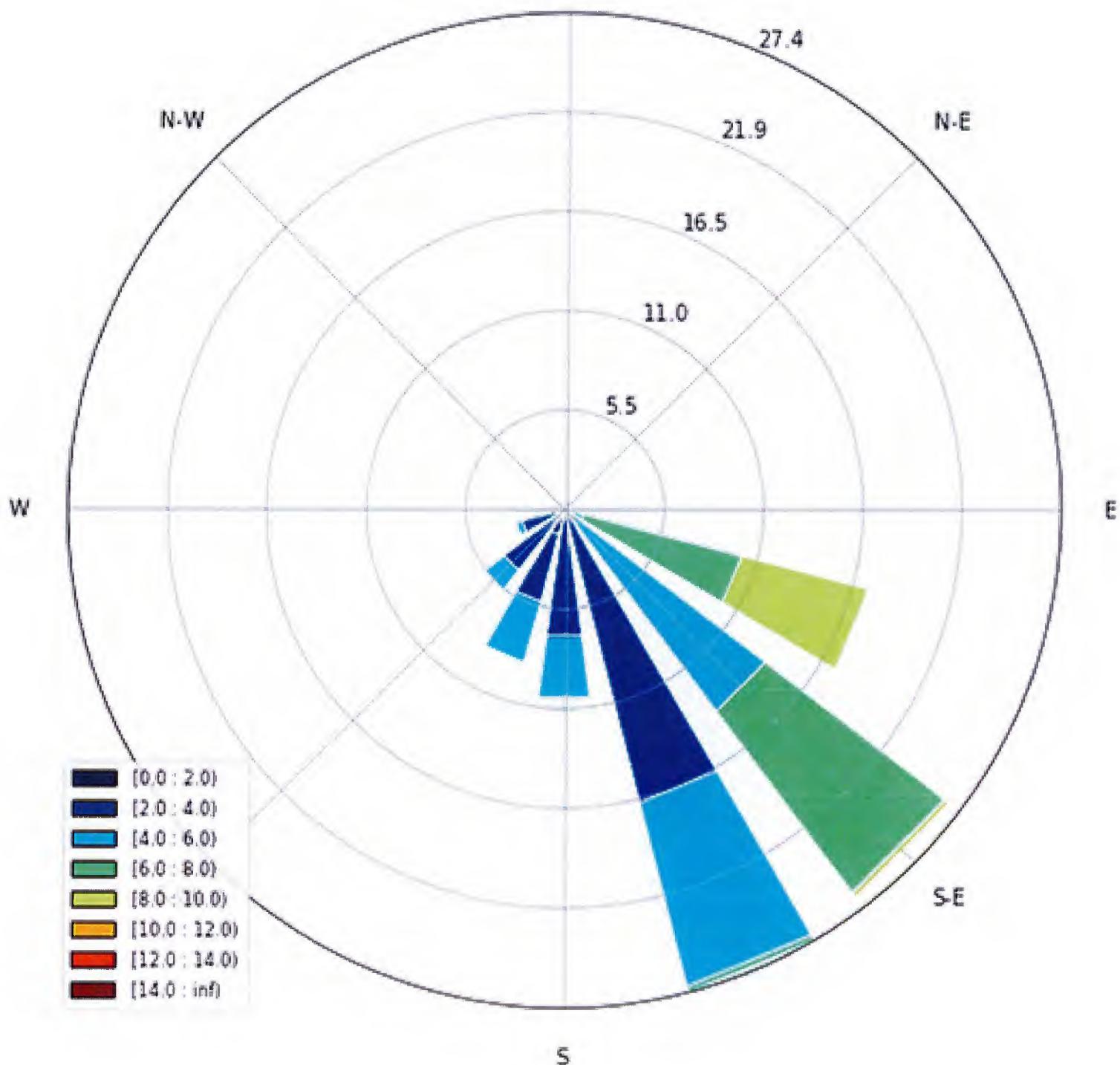
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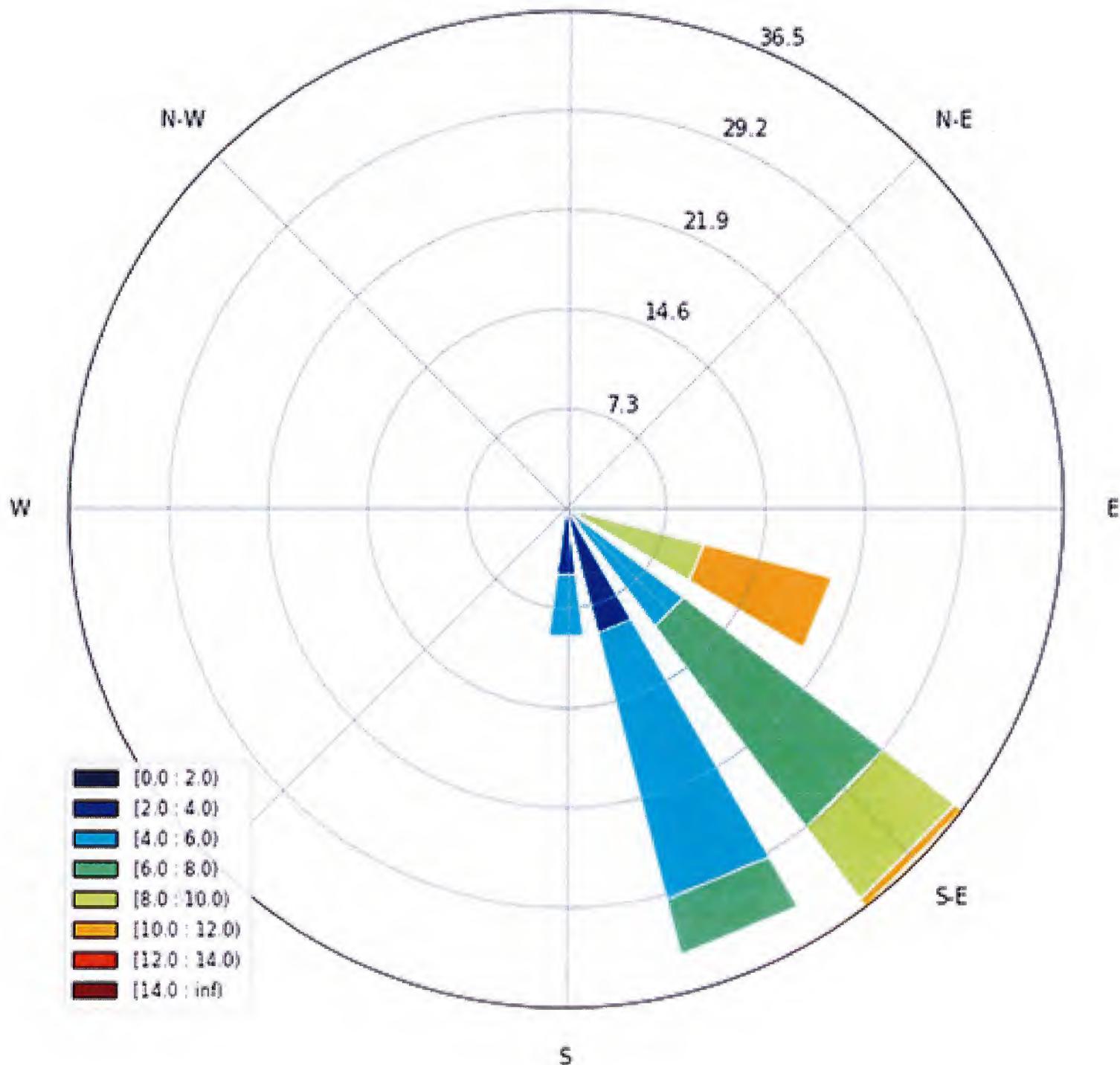
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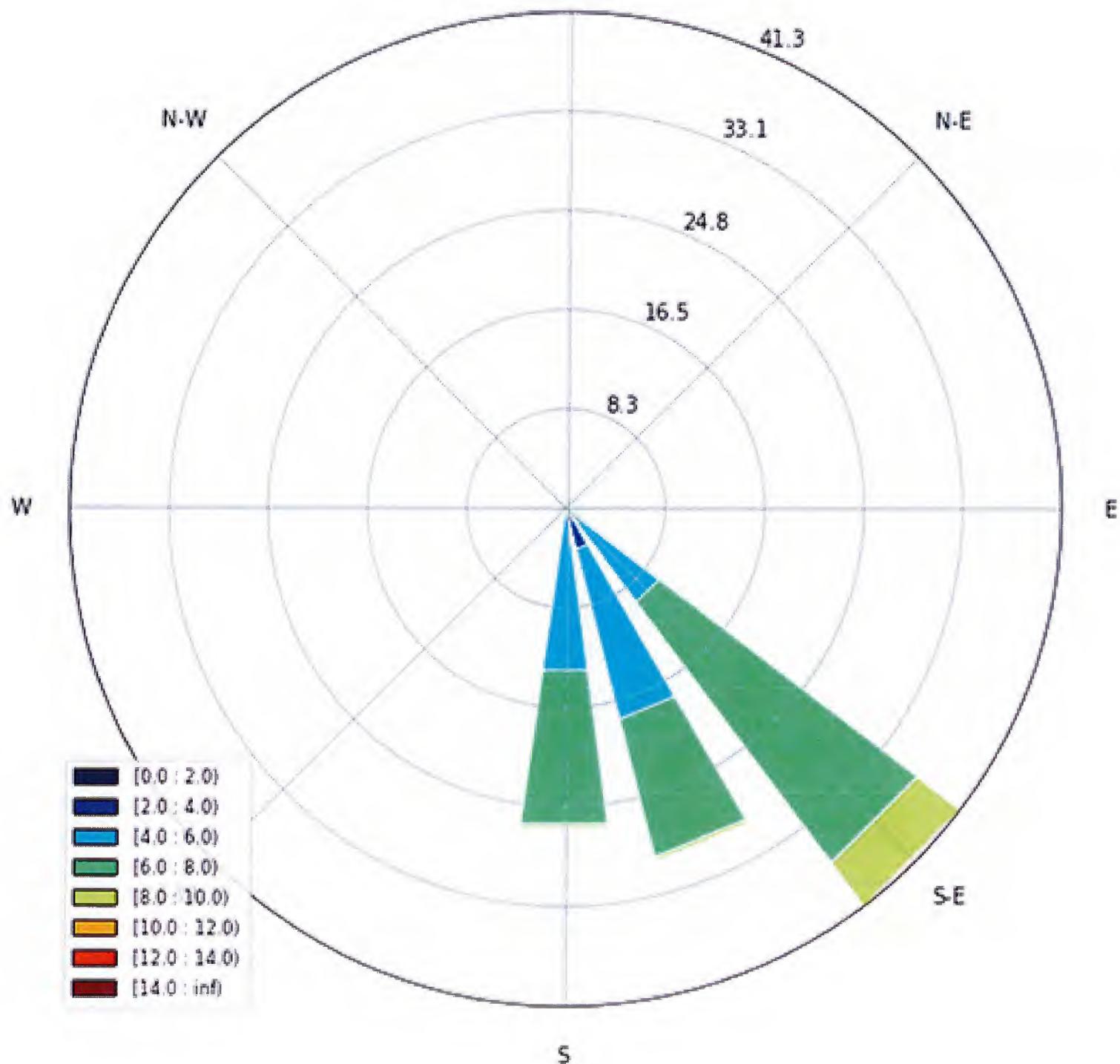
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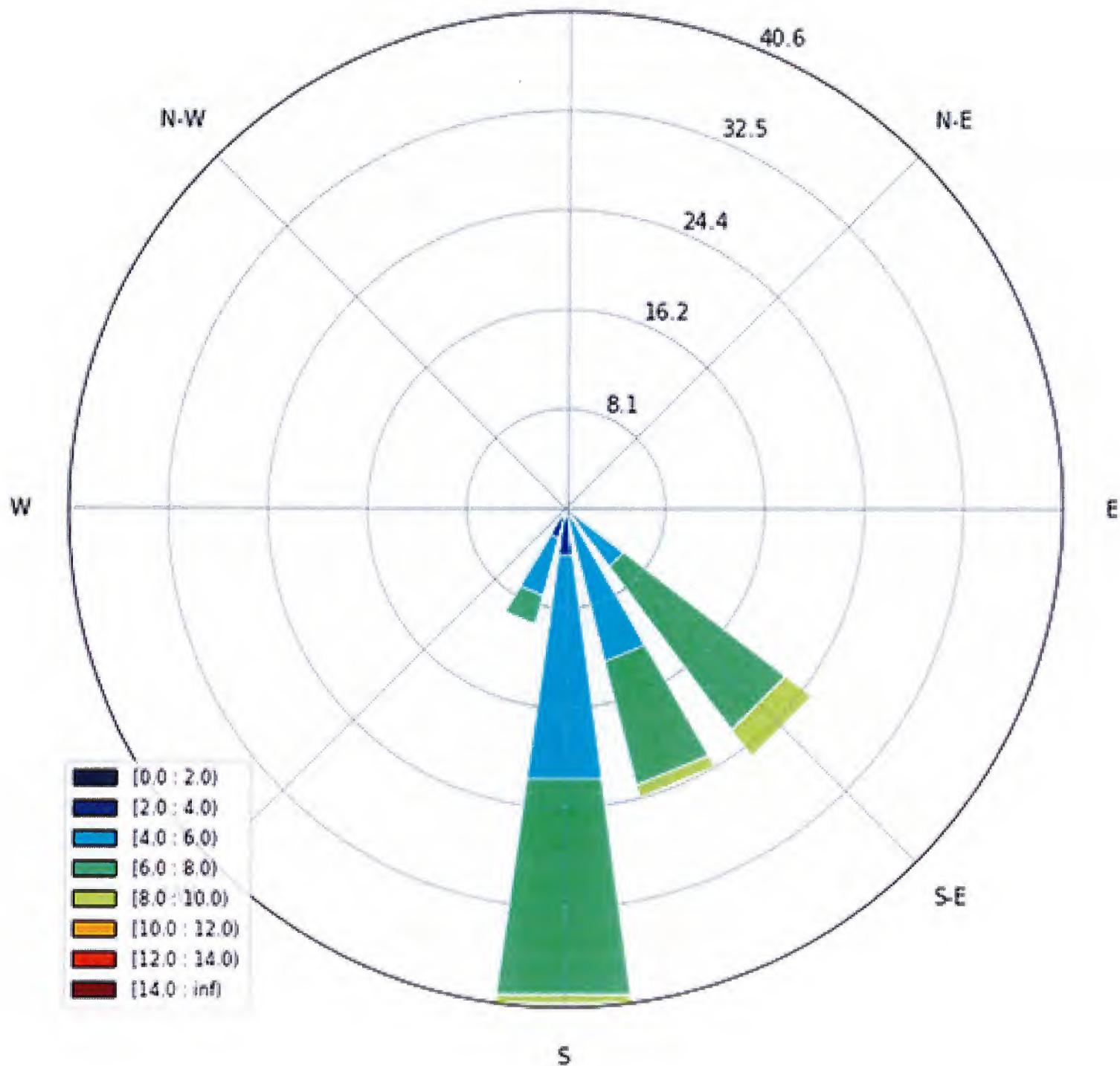
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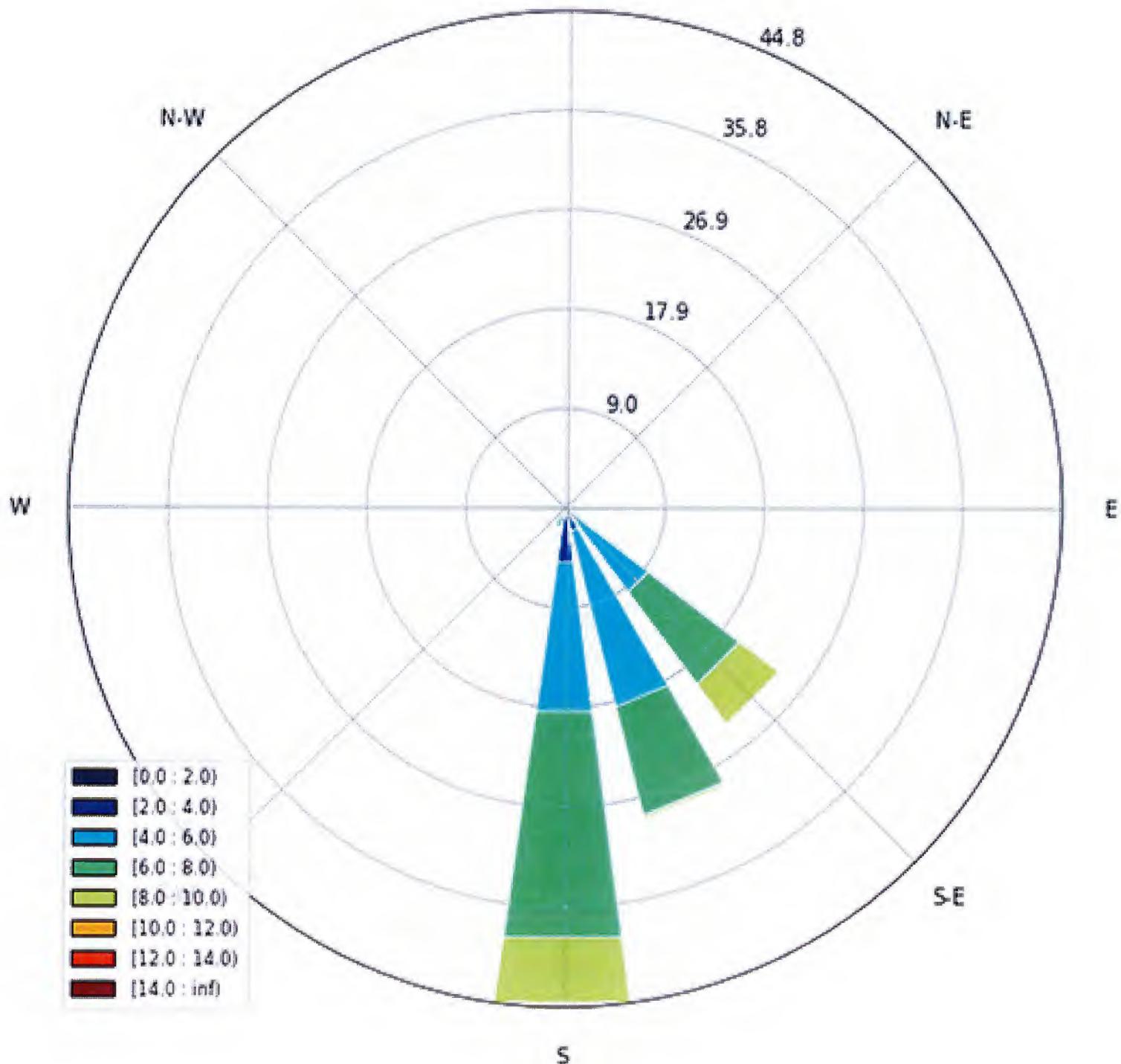
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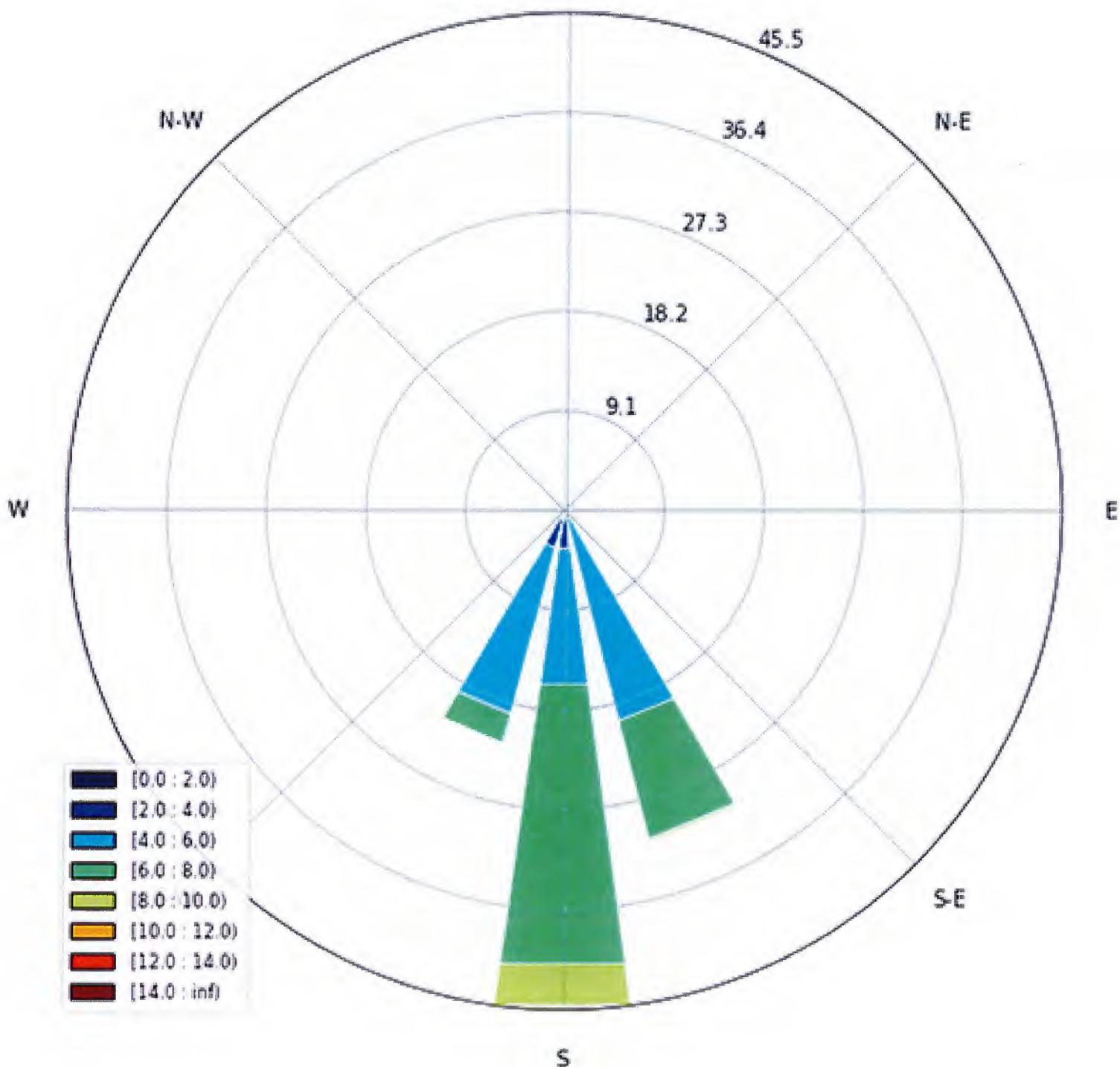
FPC: July 18 2018



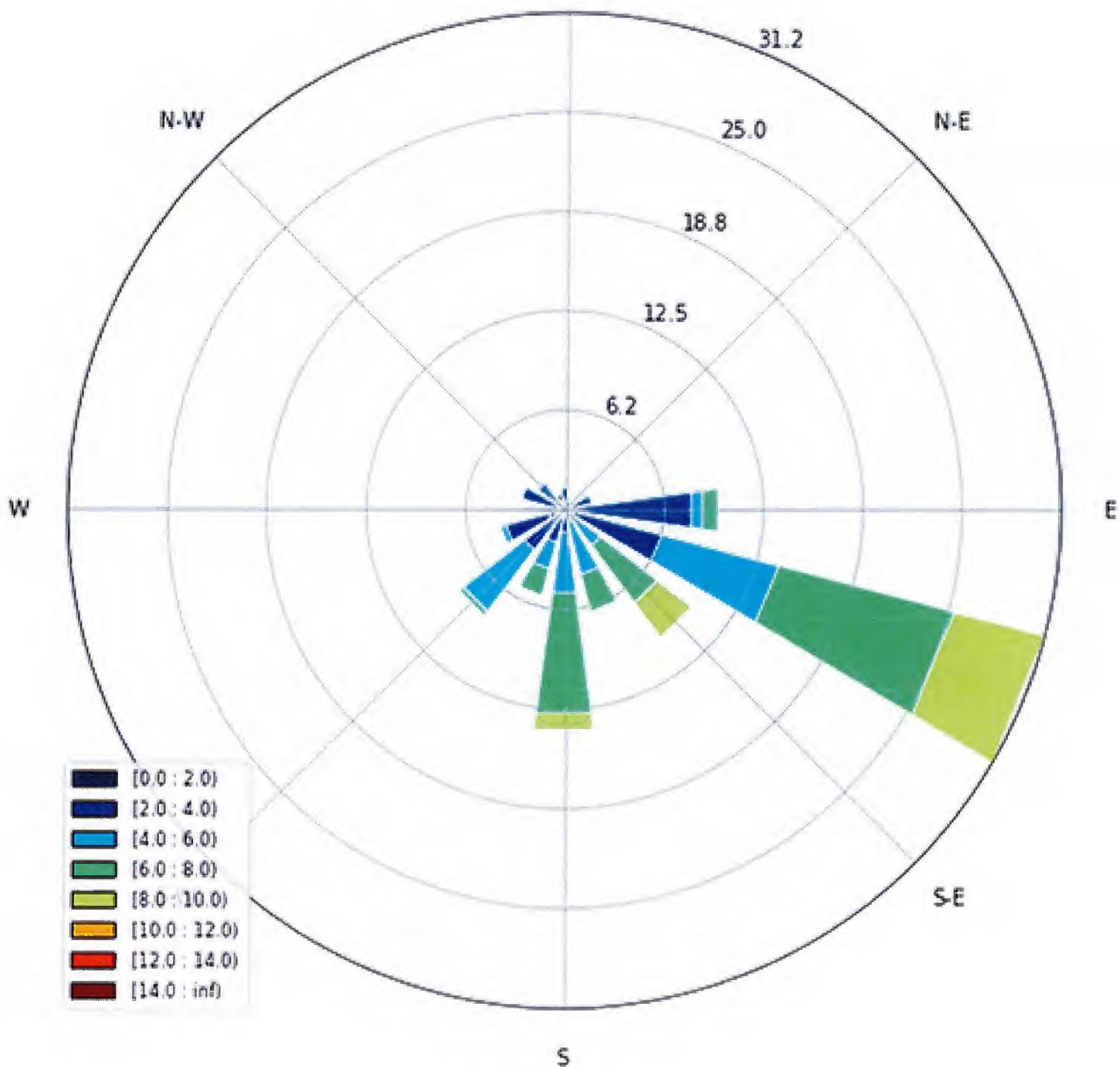
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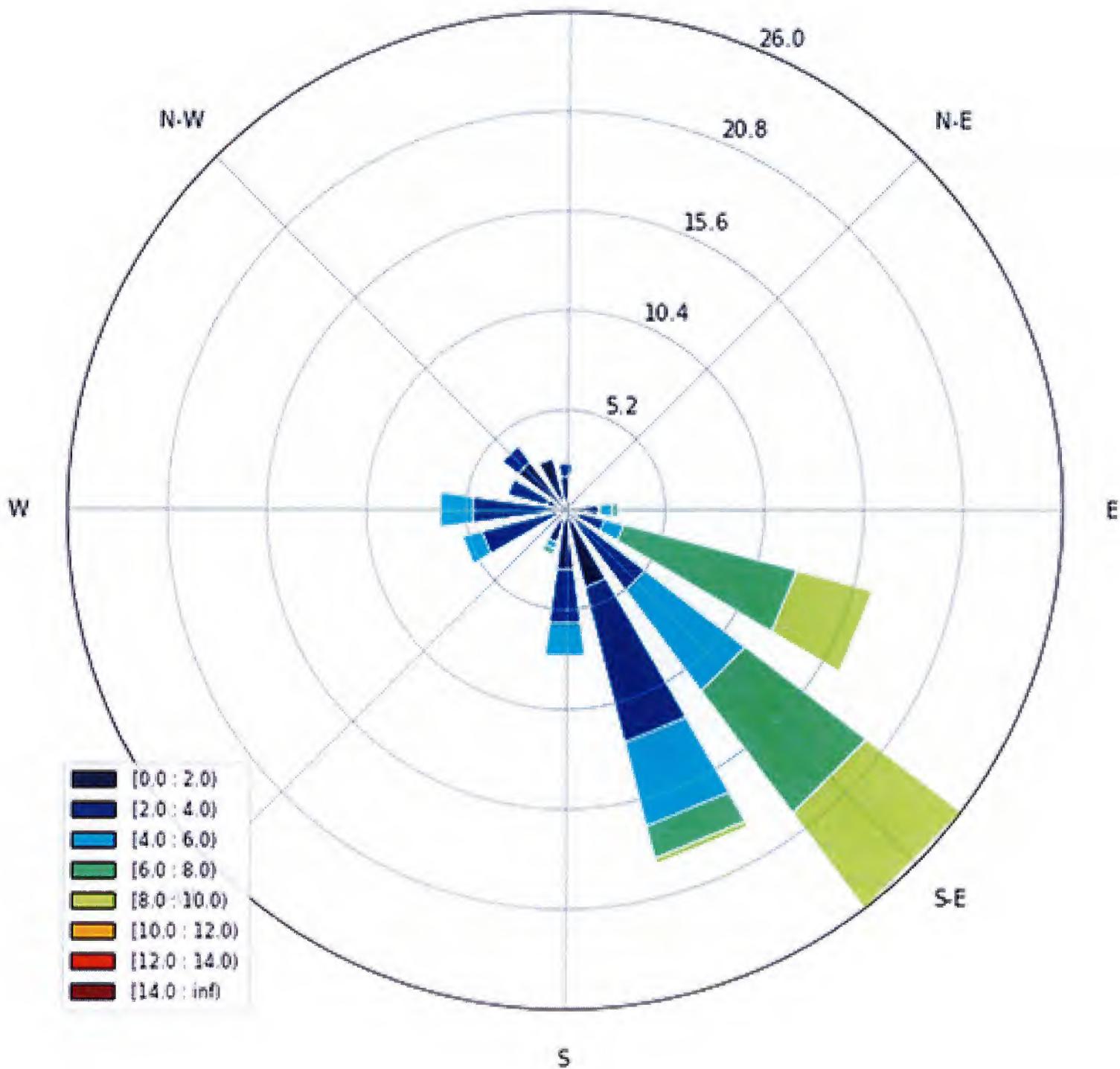
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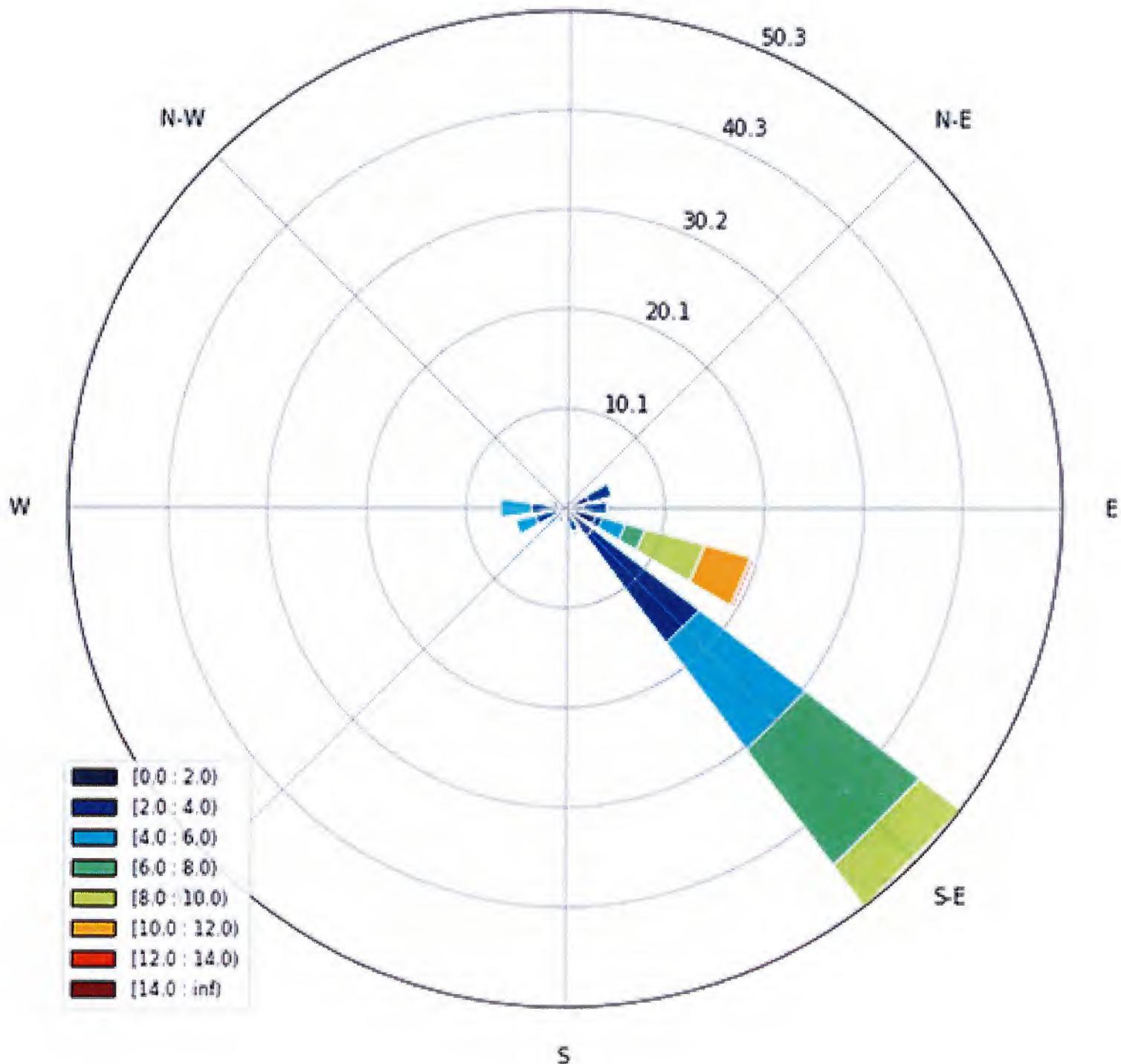
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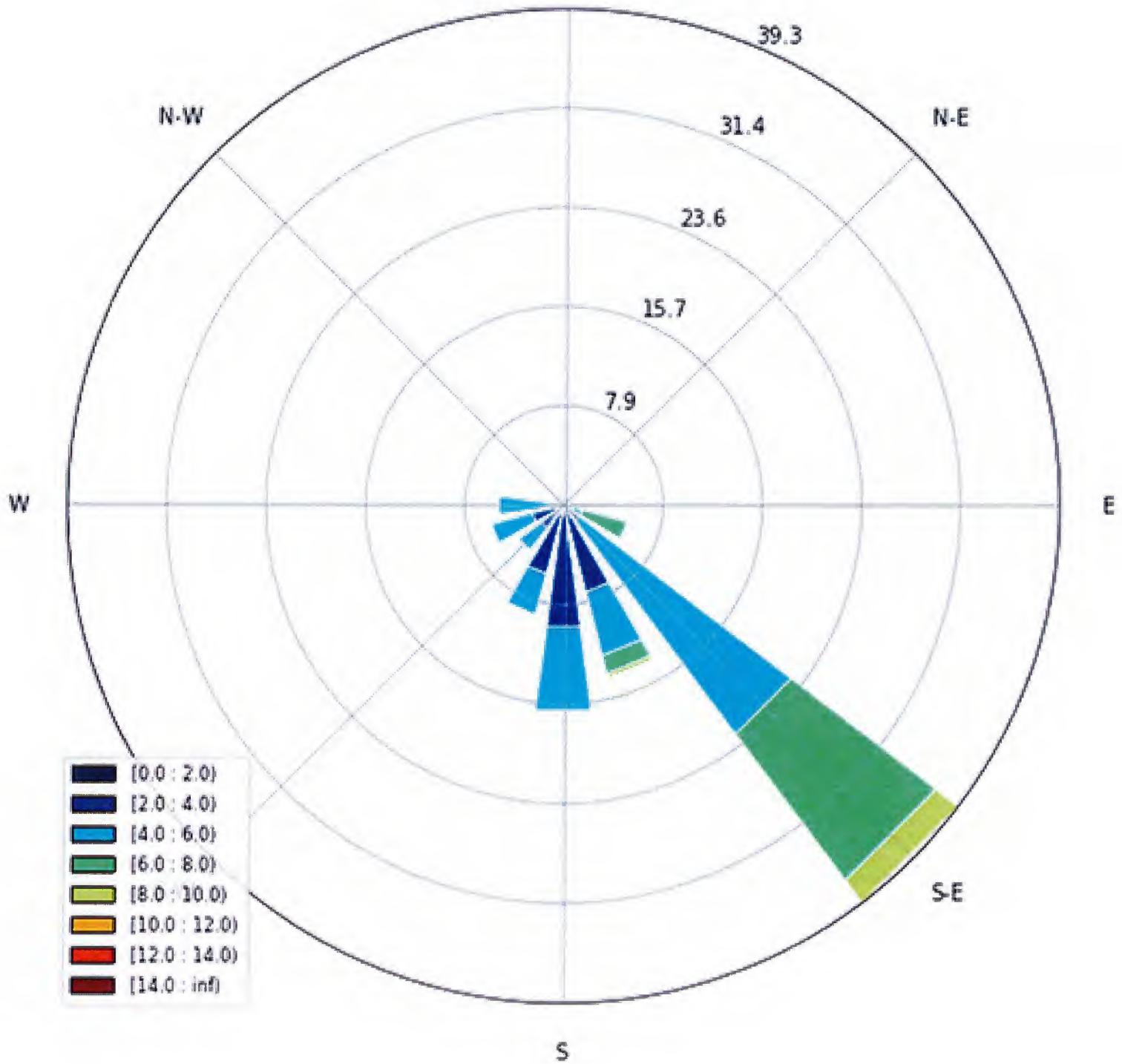
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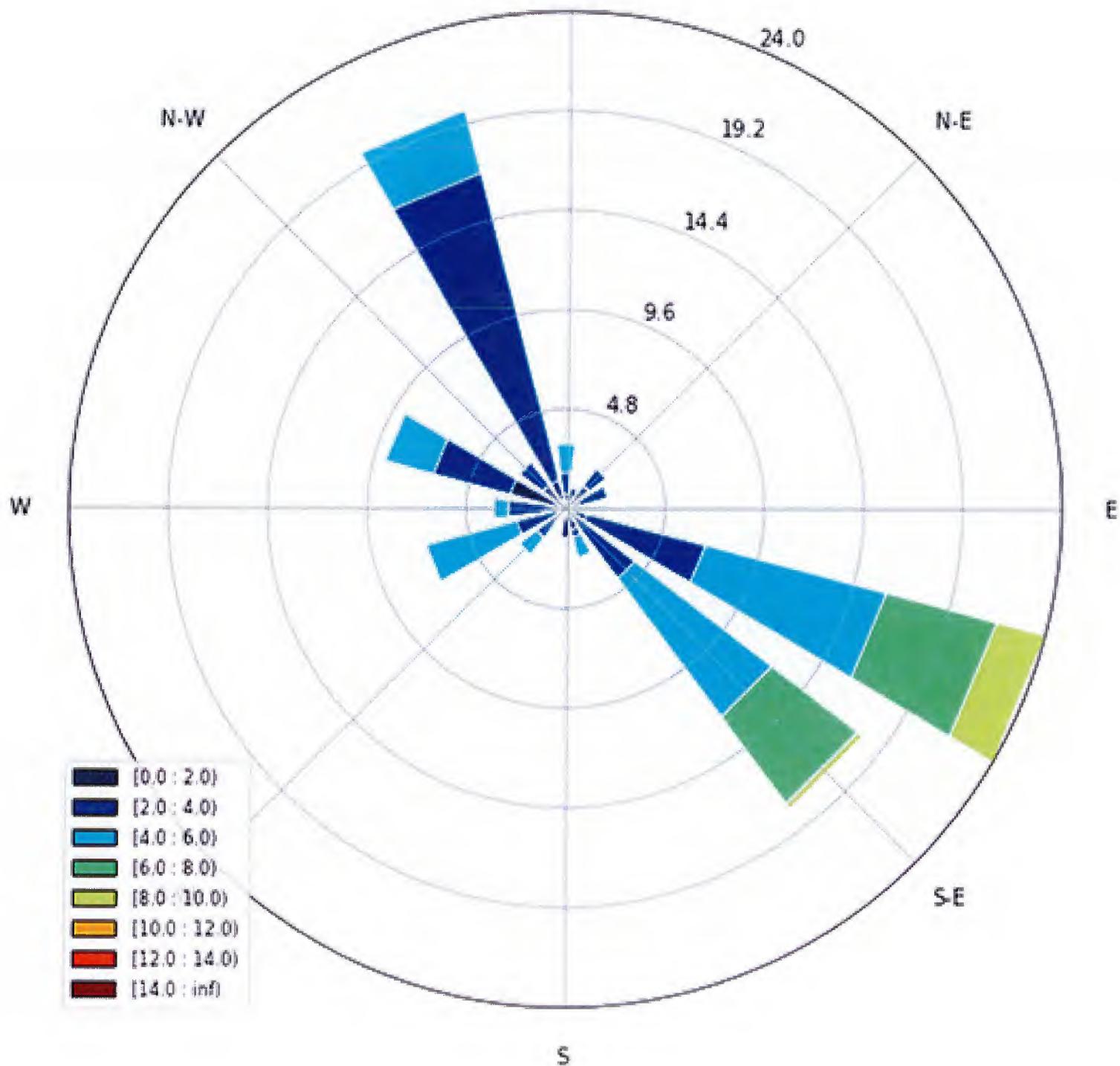
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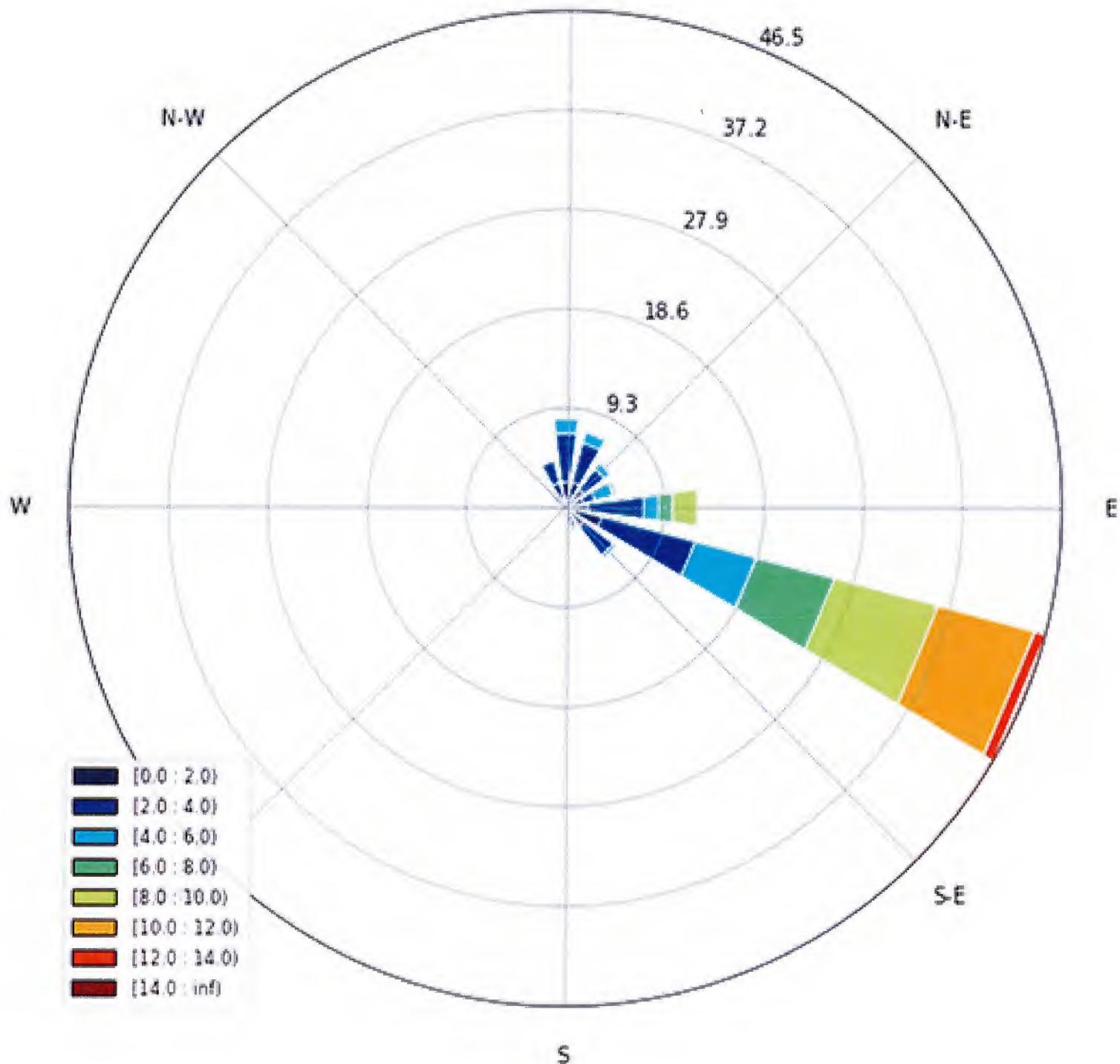
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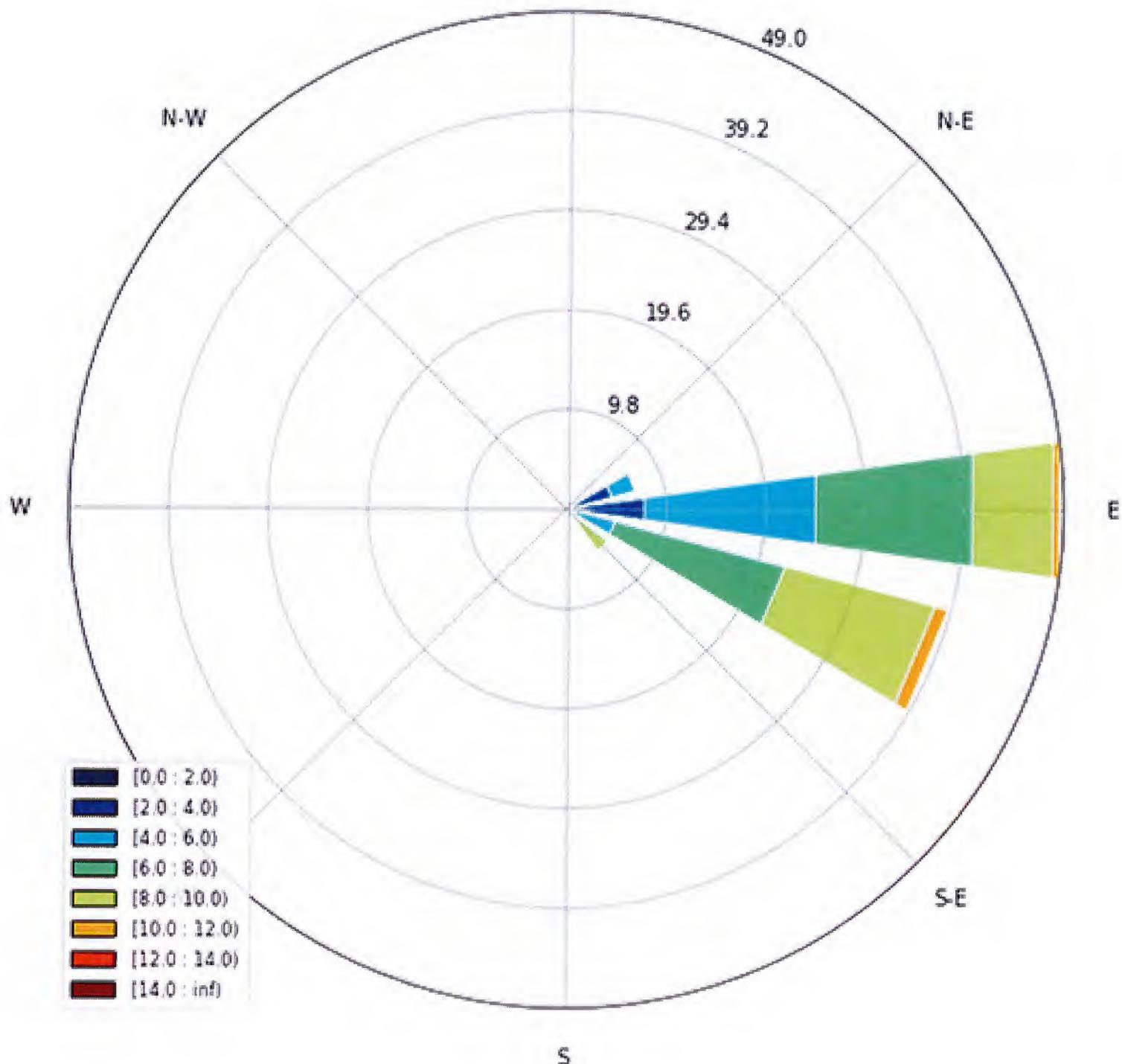
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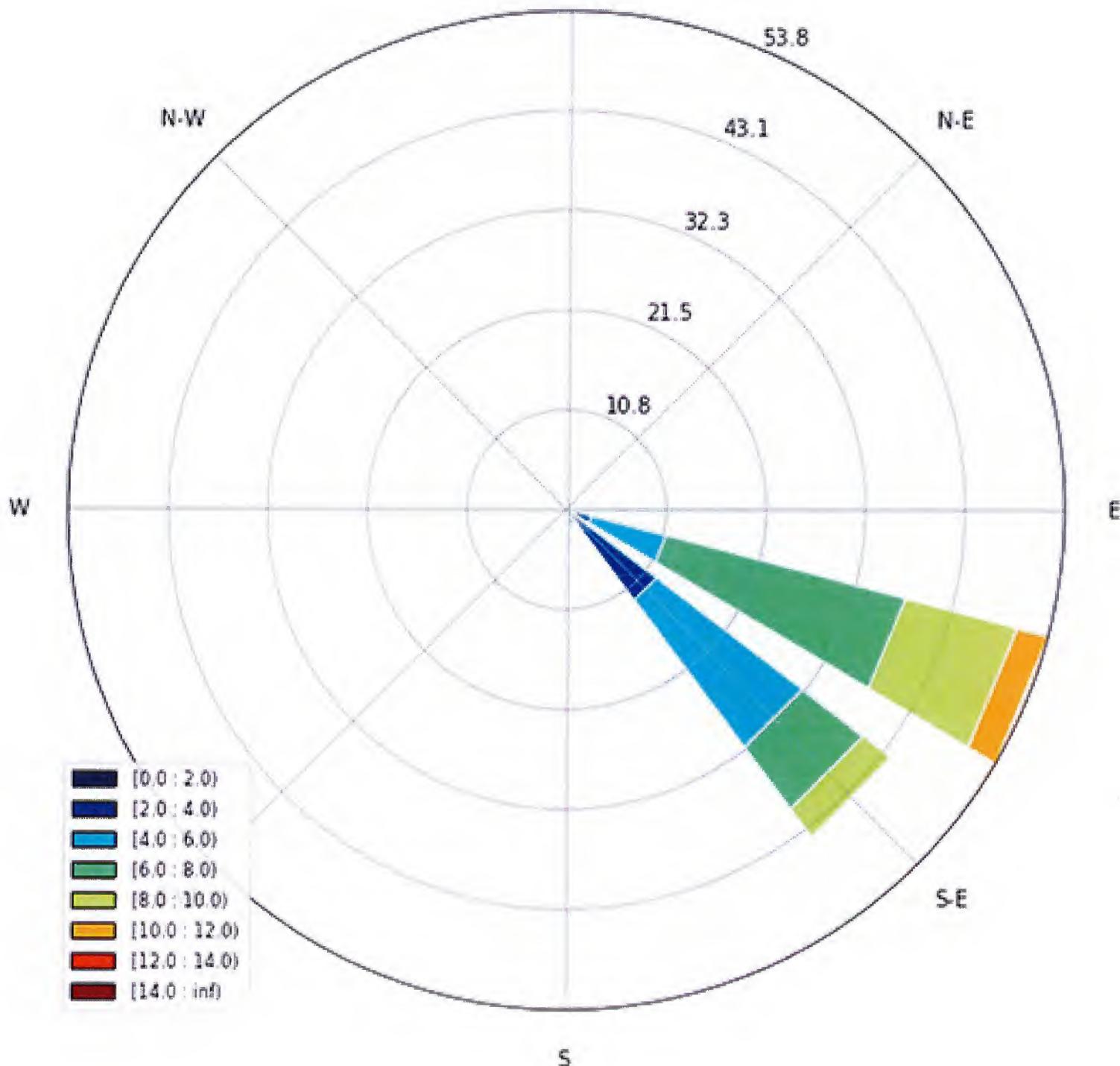
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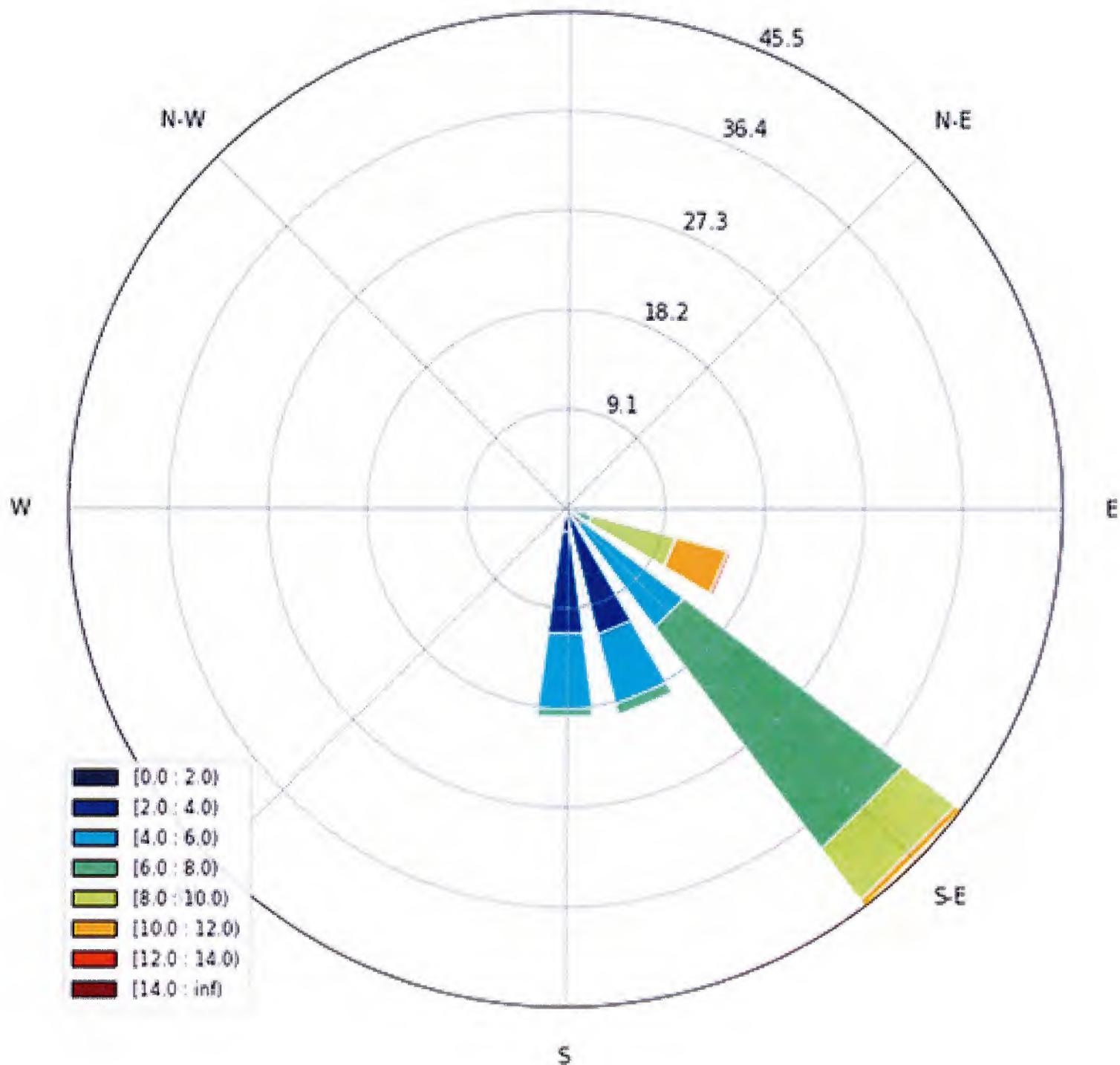
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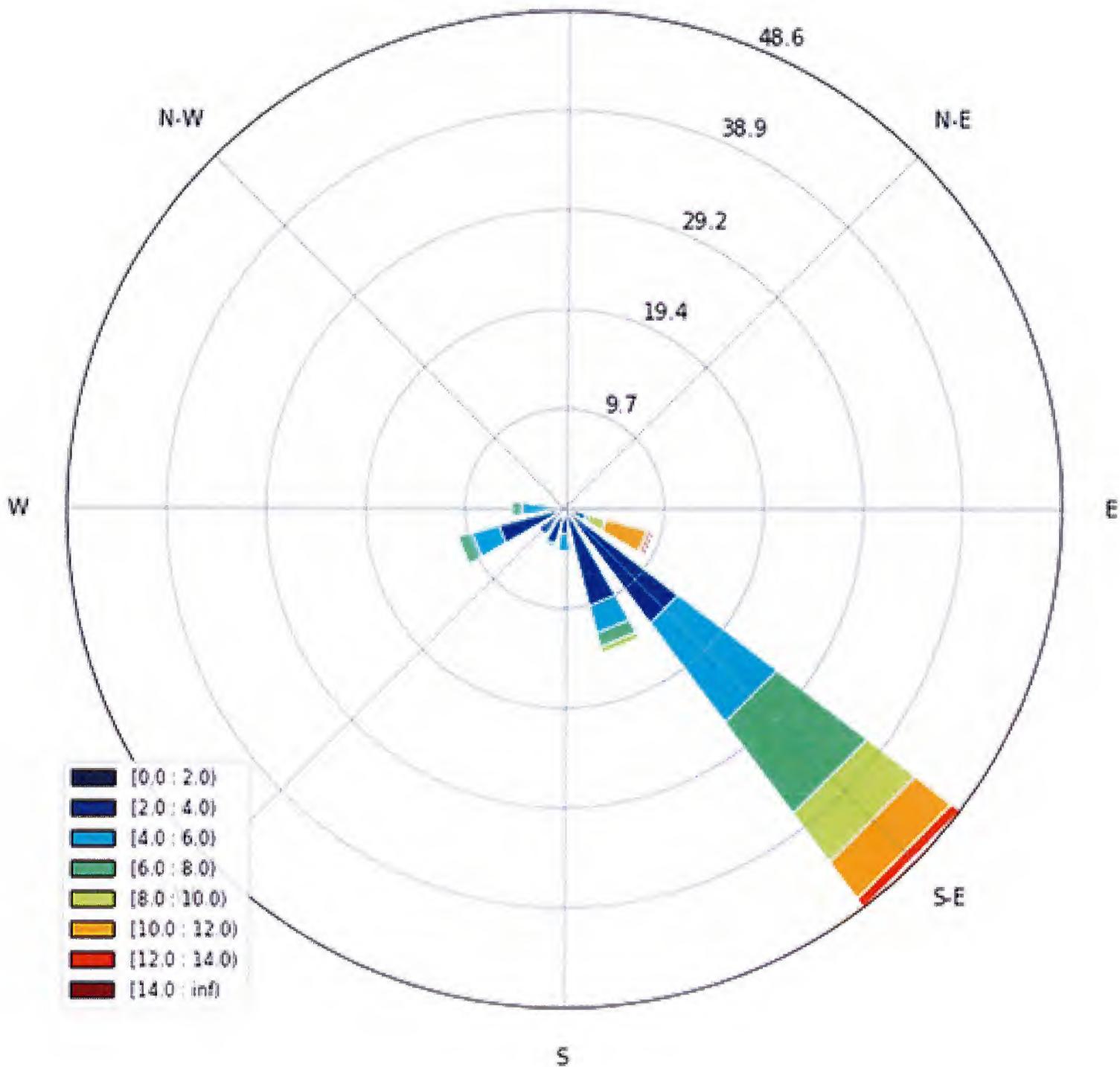
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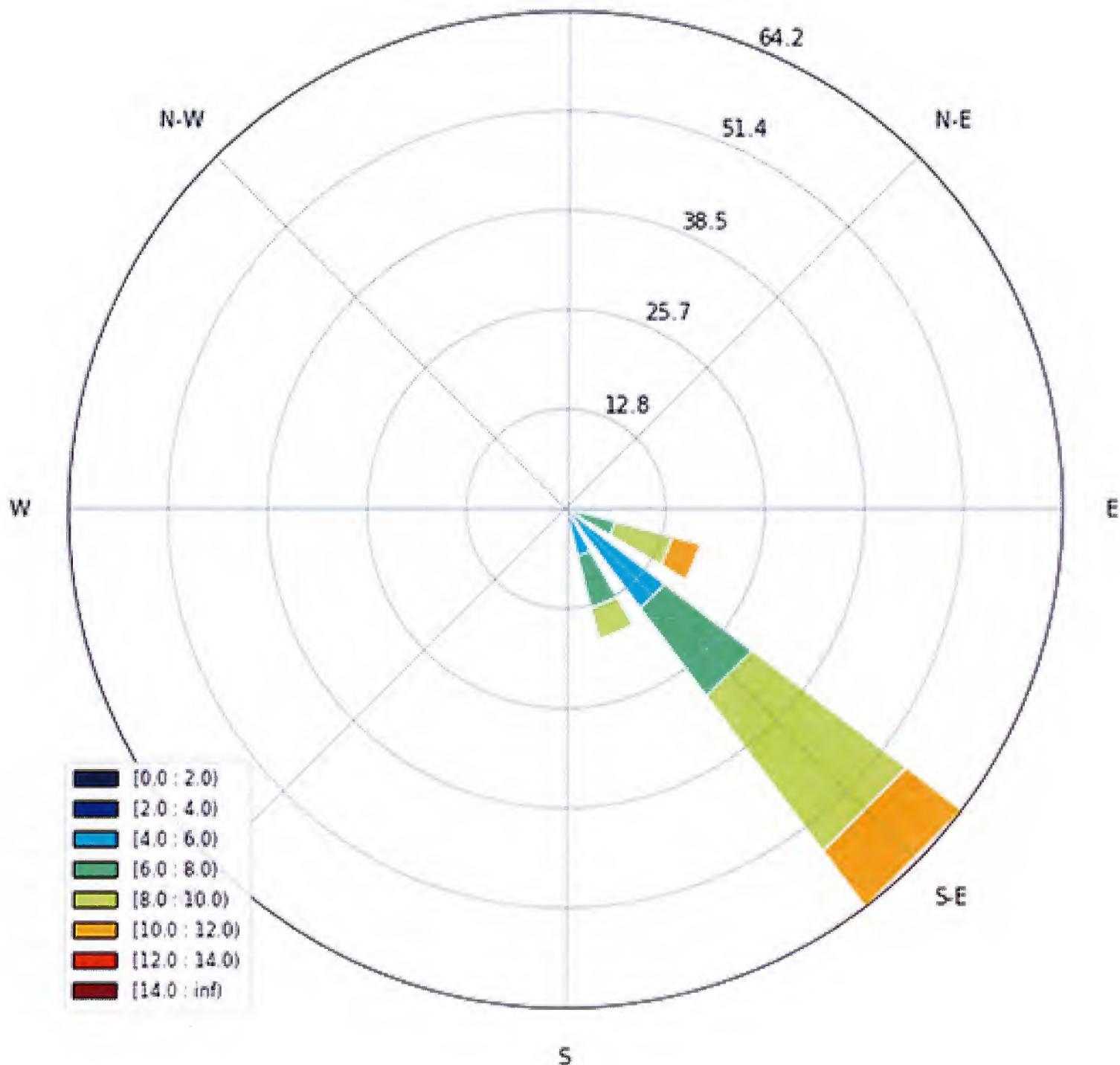
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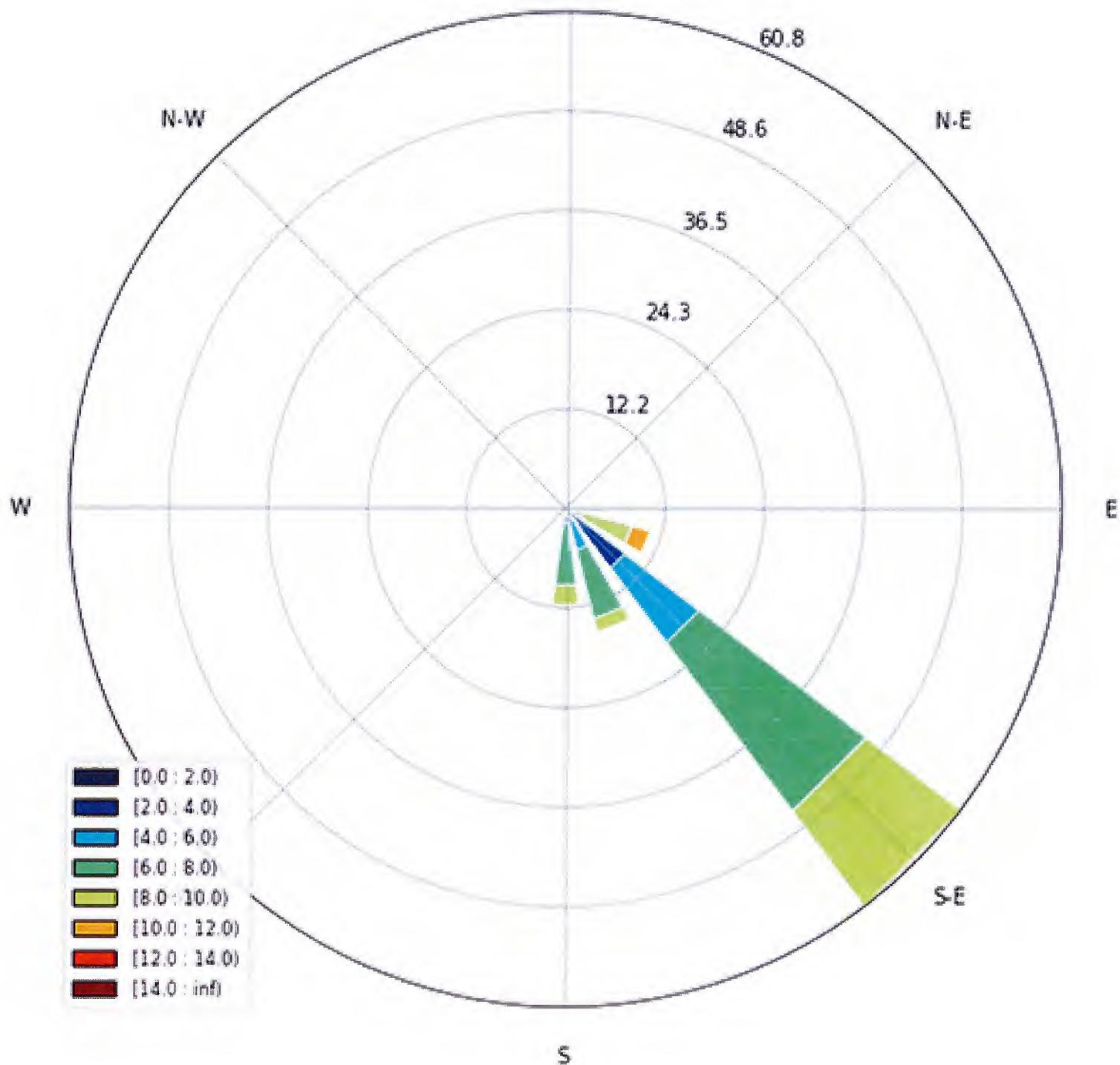
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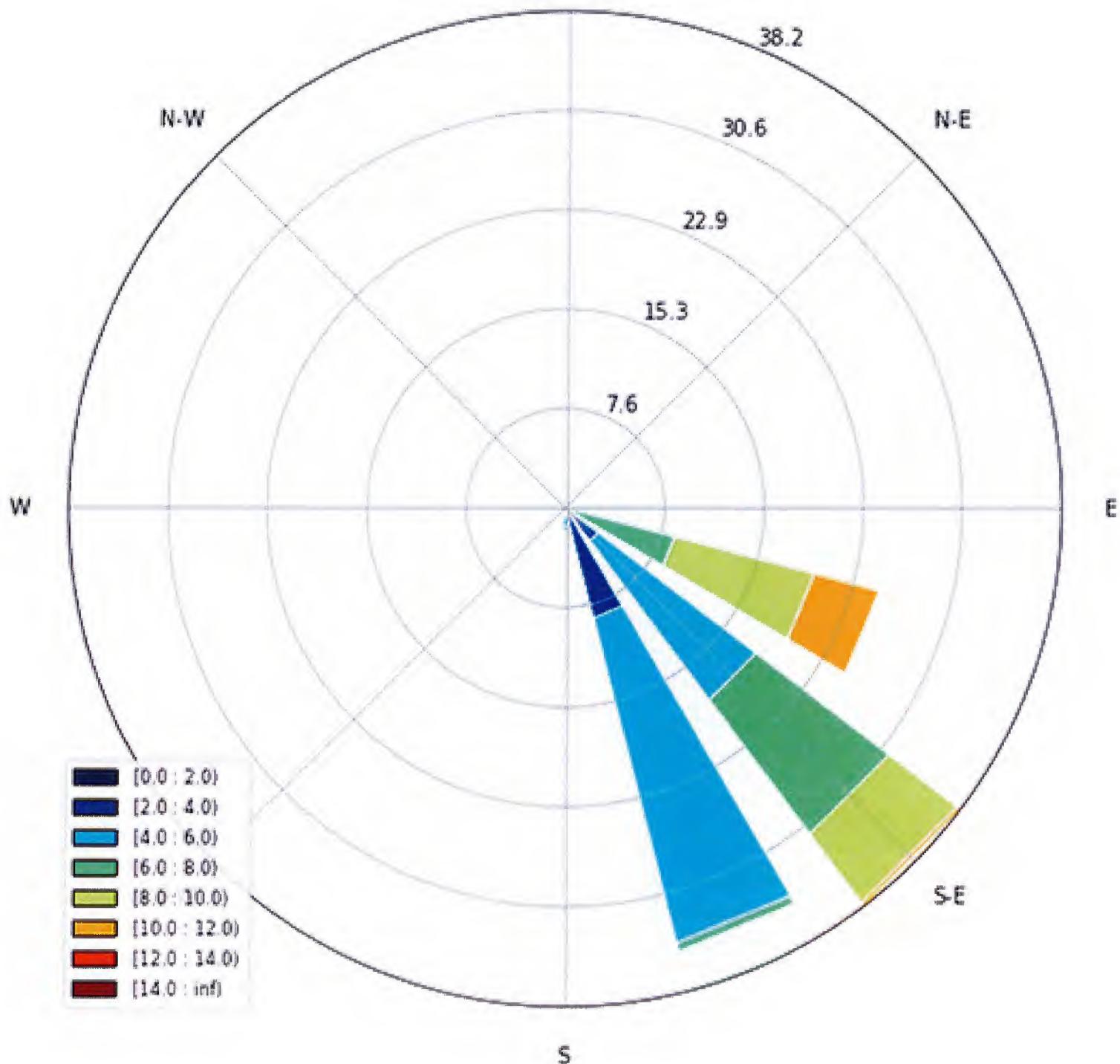
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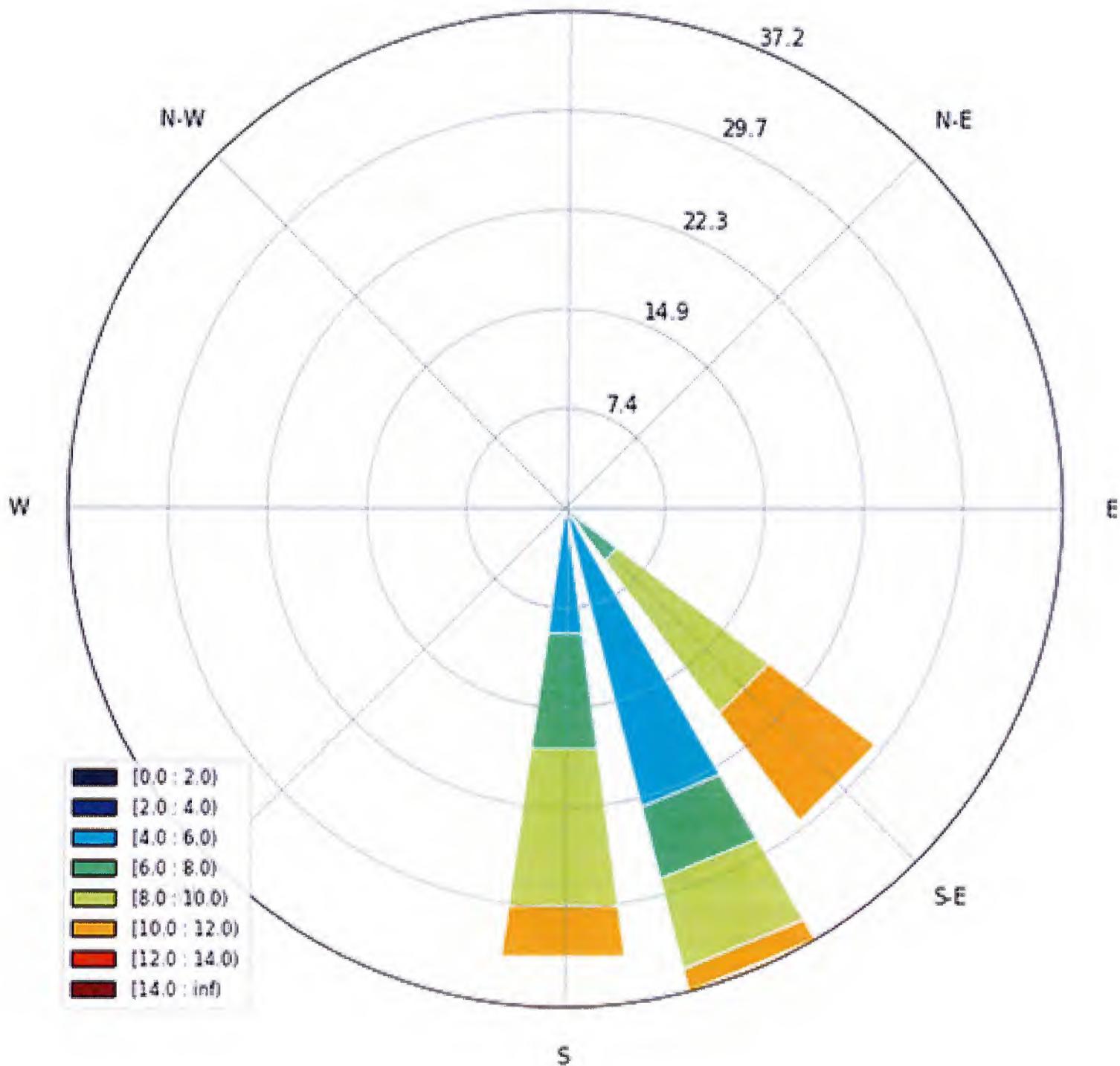
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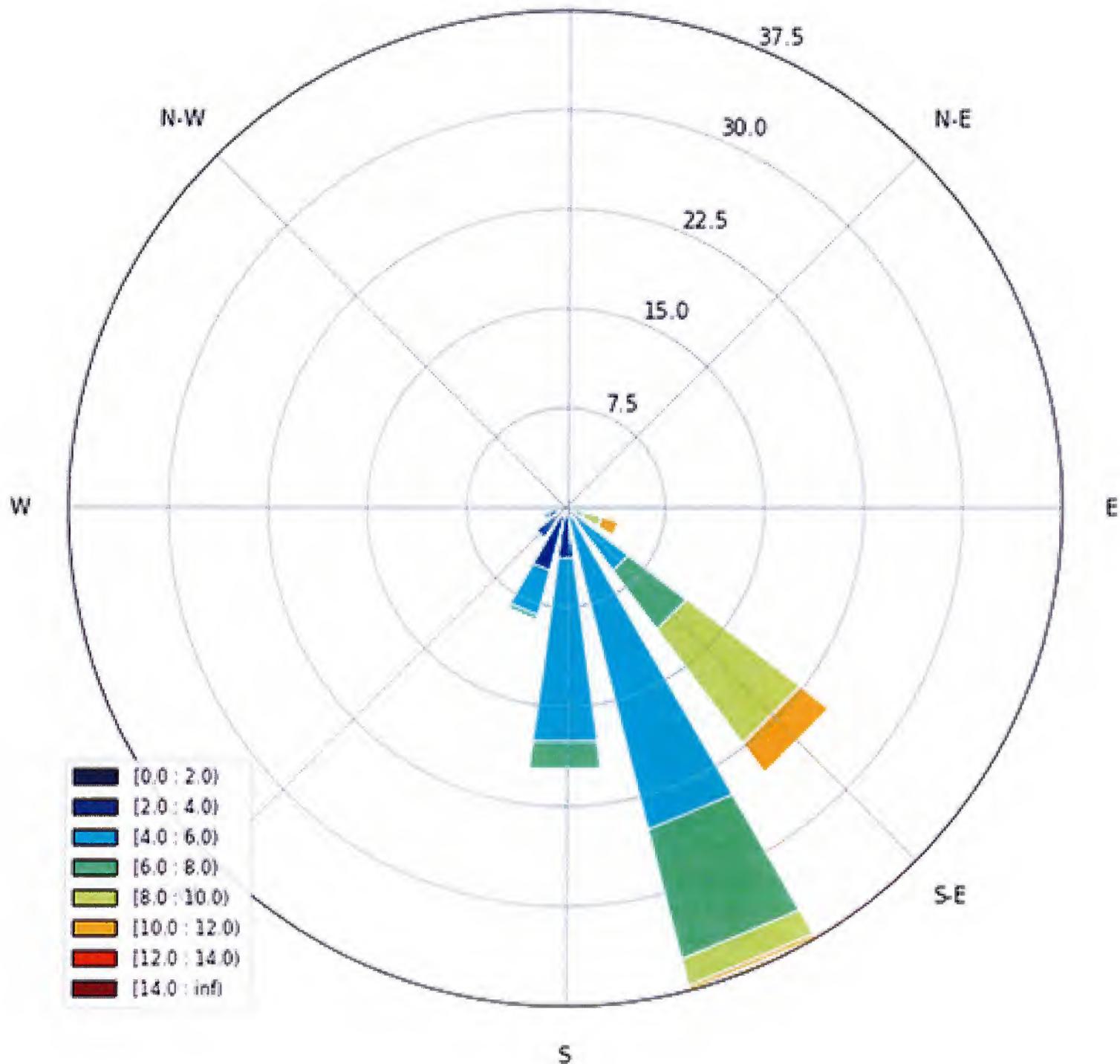
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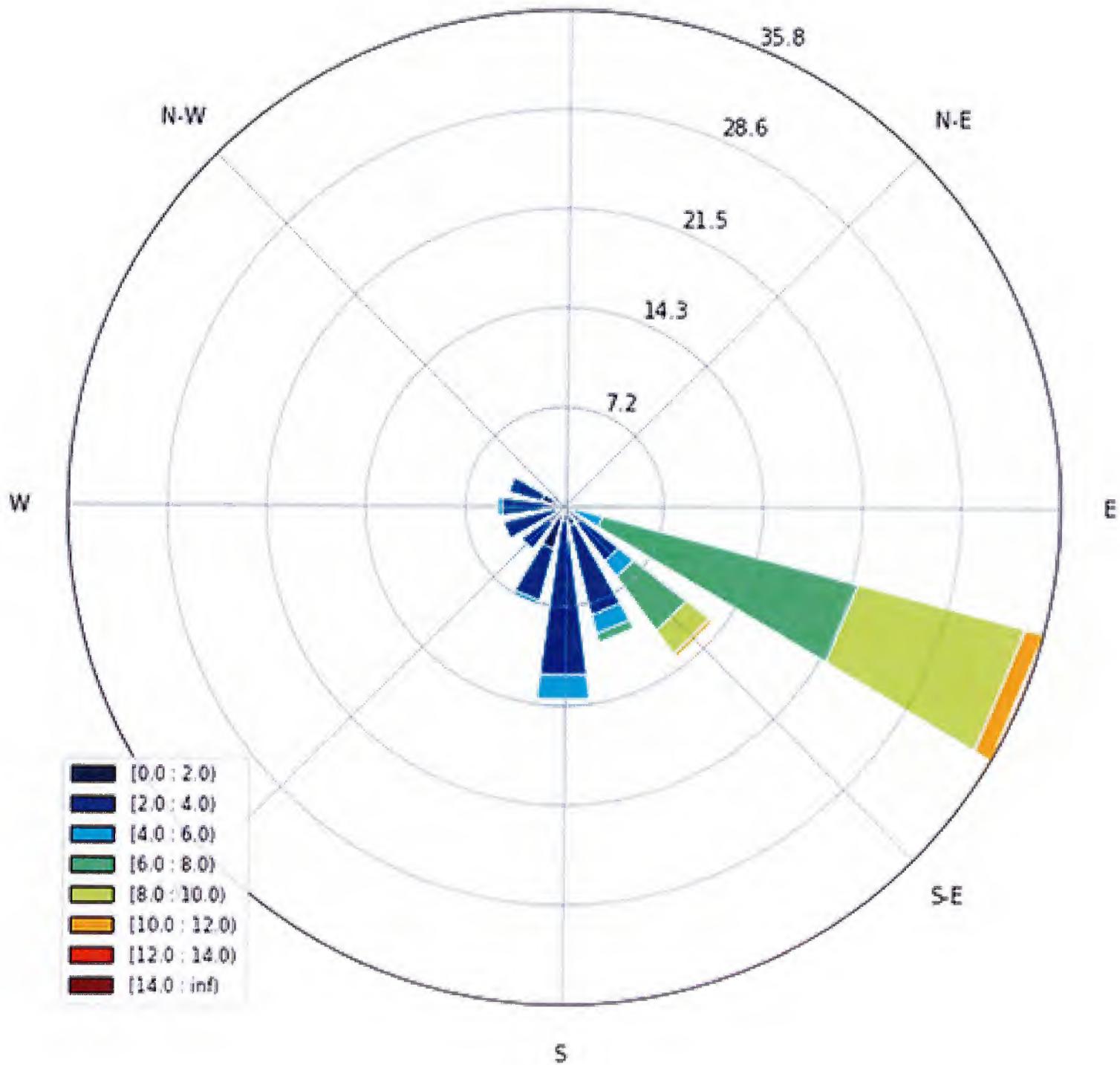
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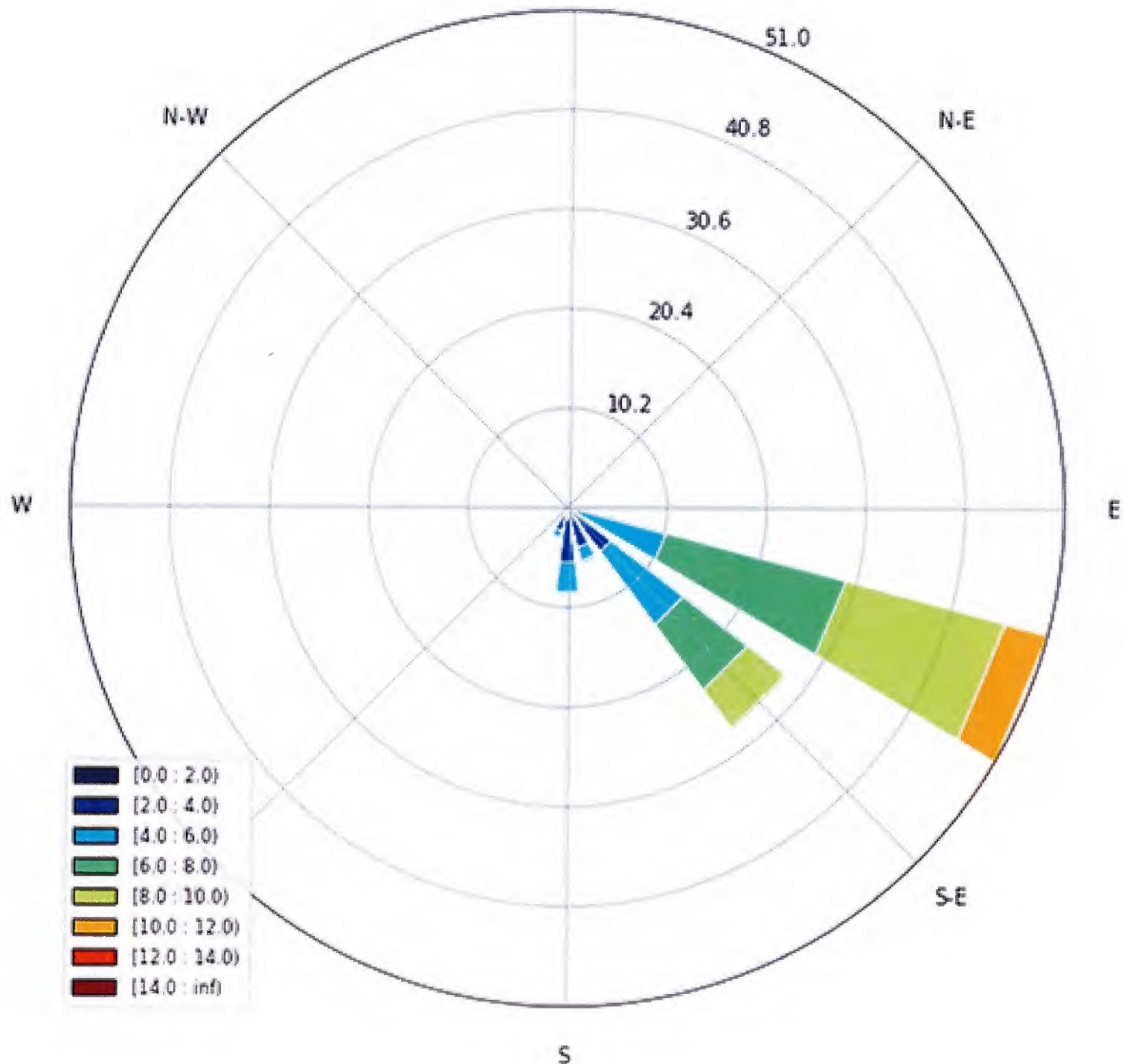
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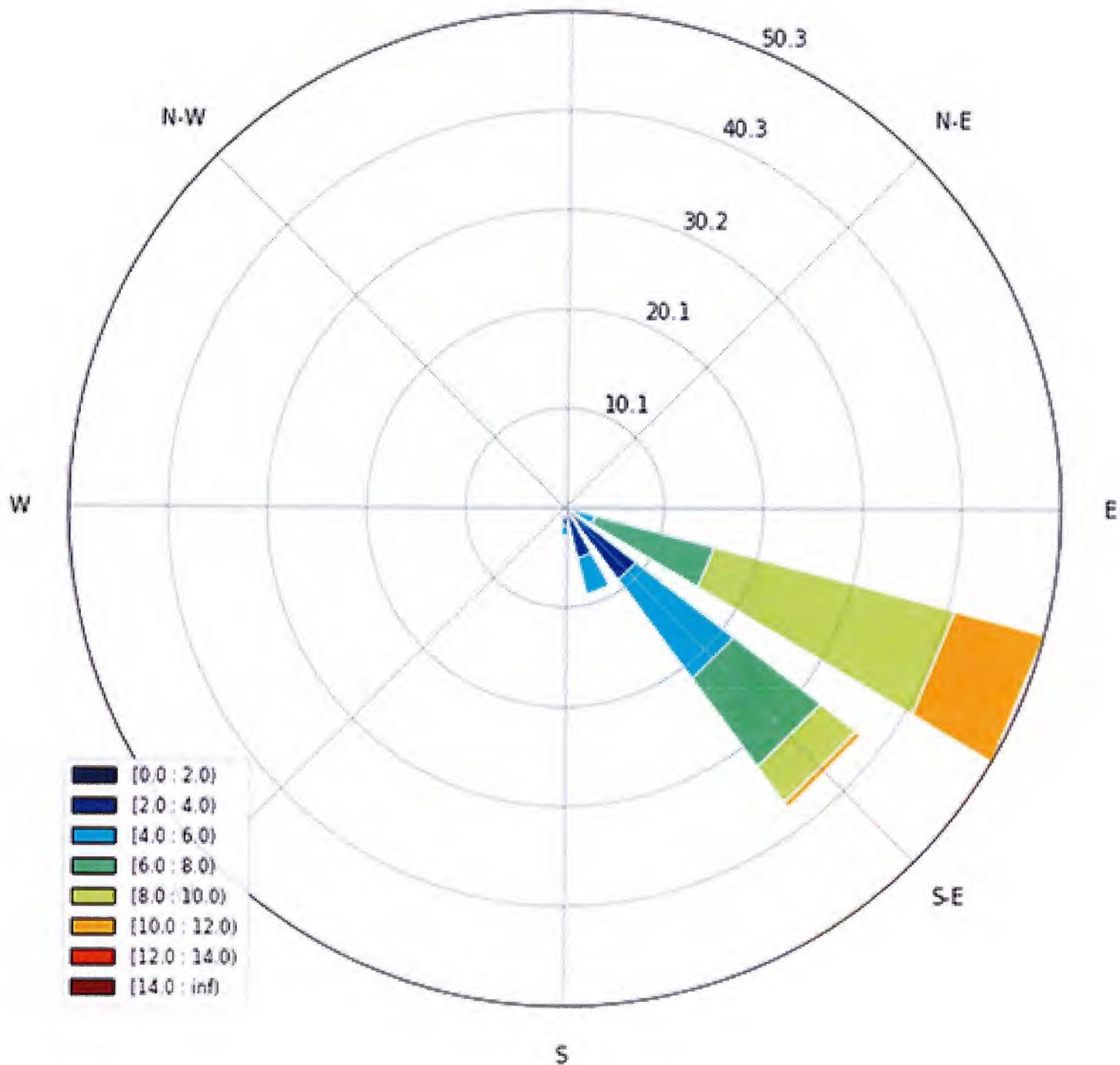
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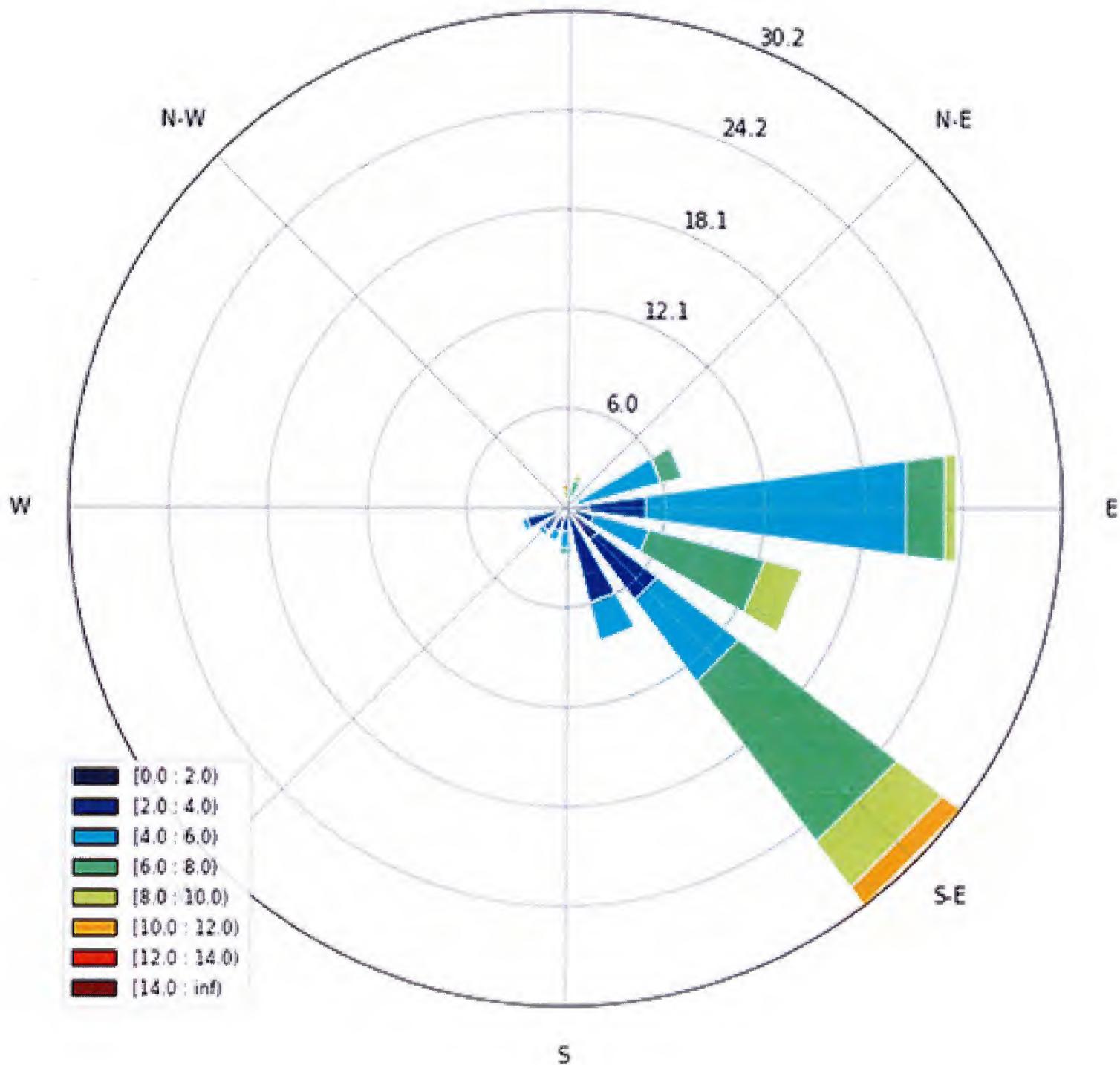
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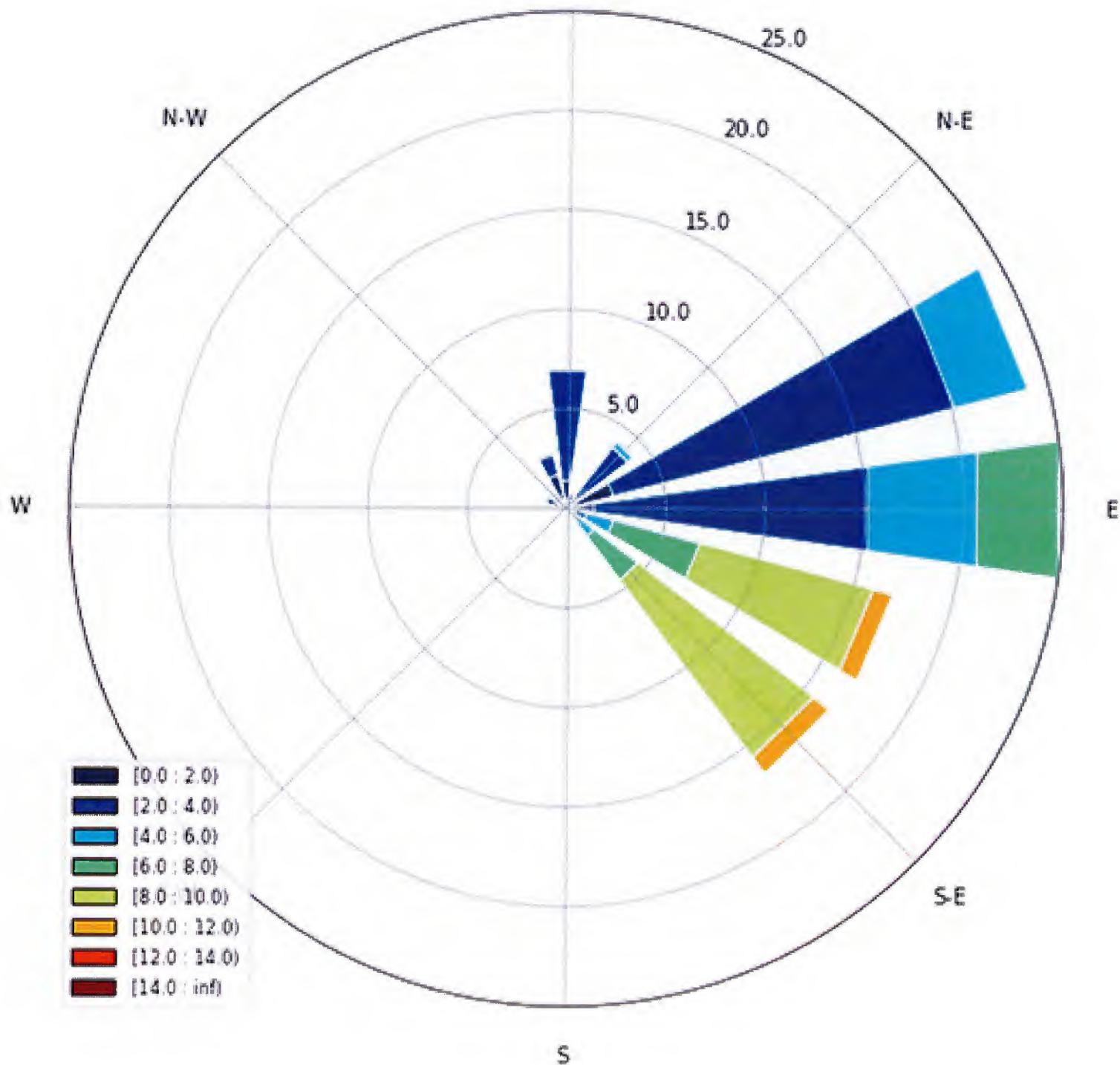
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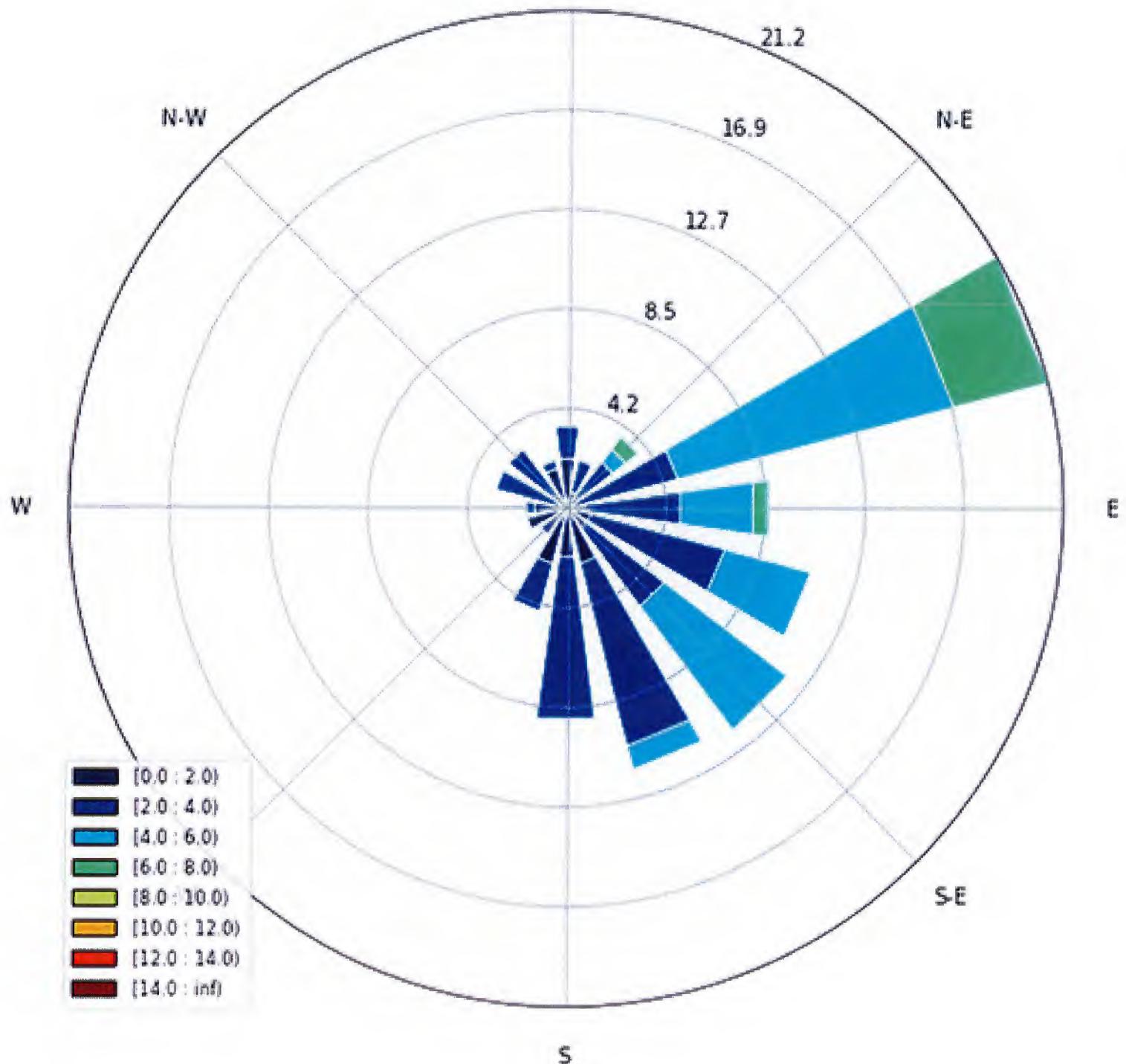
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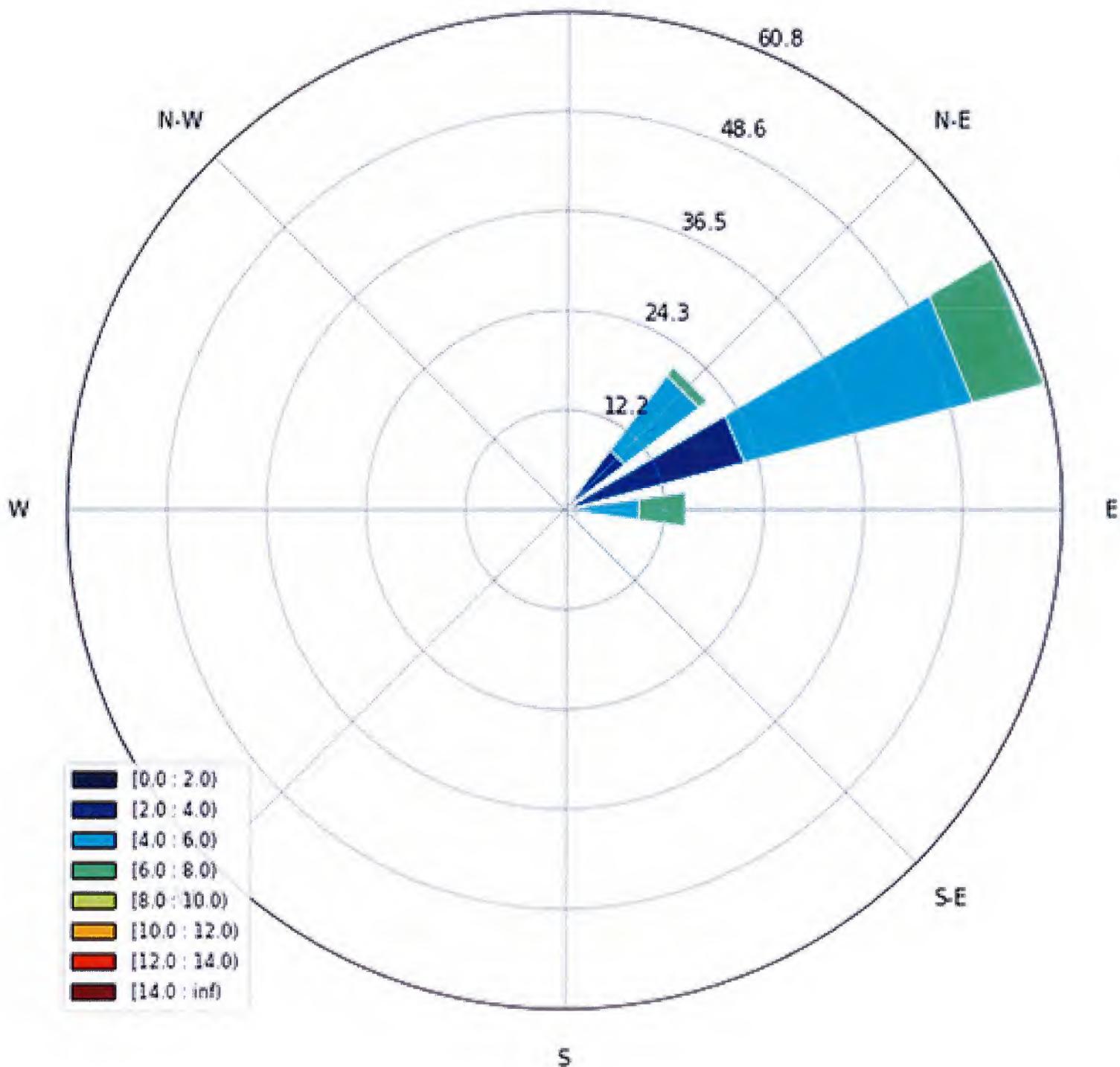
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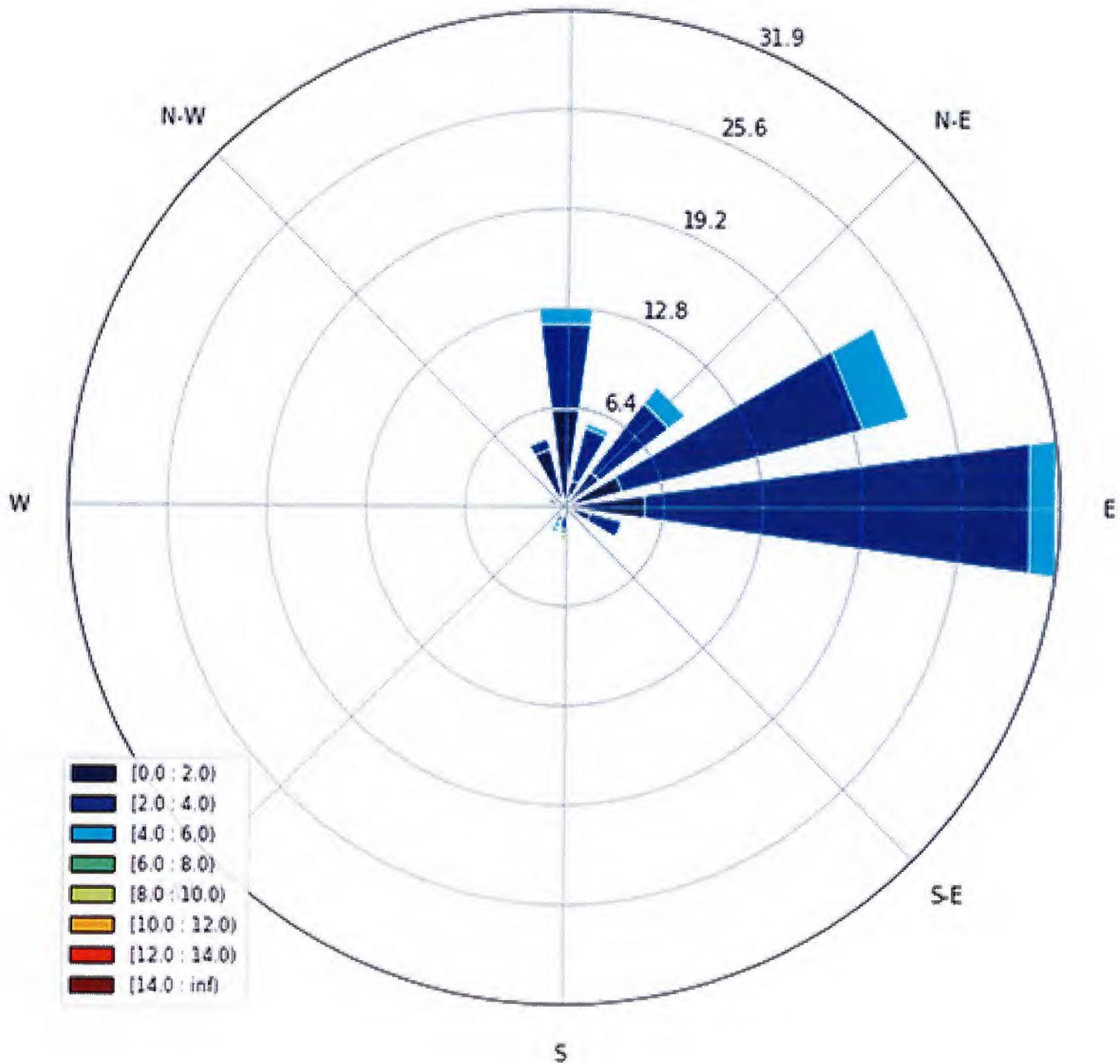
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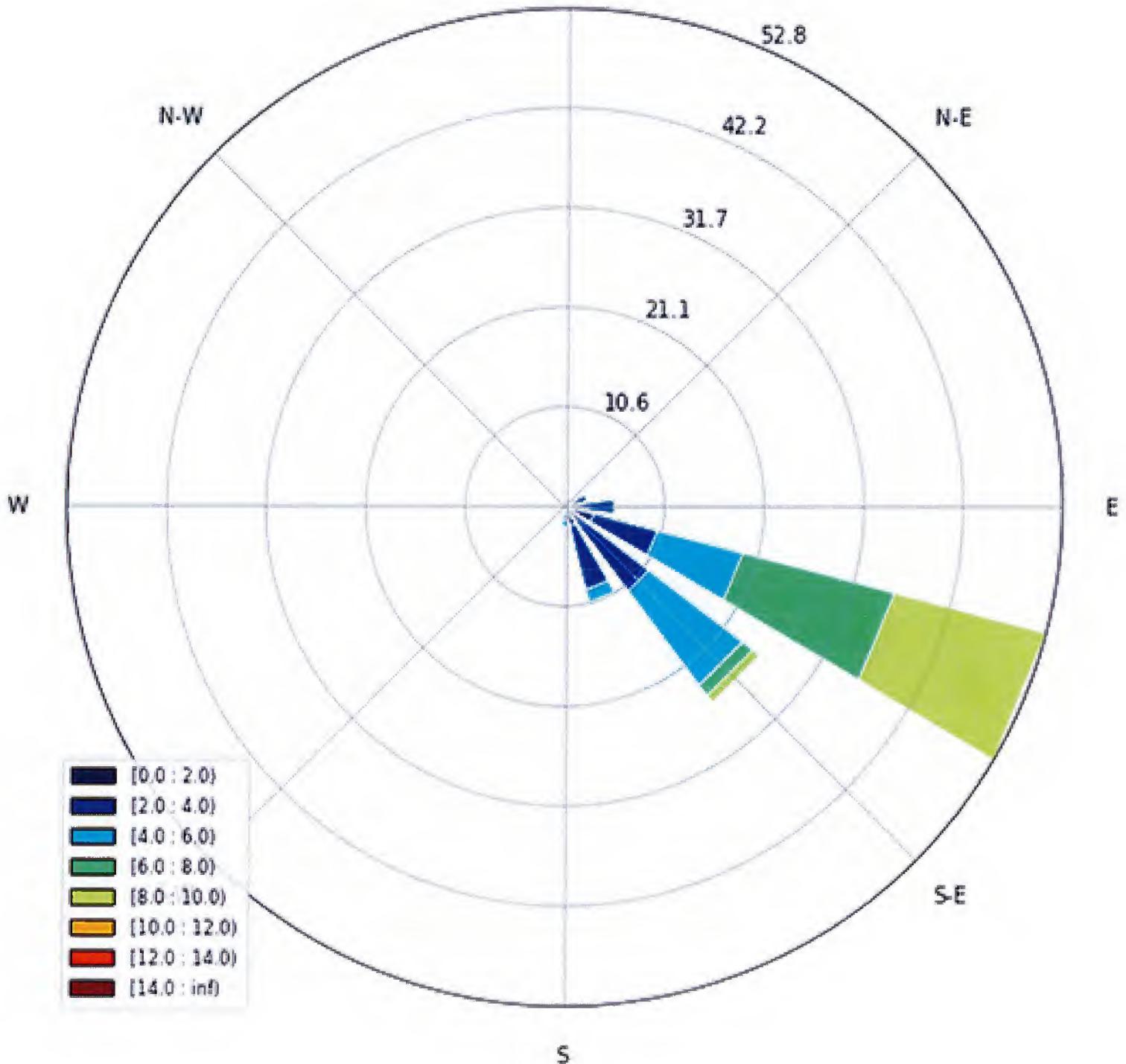
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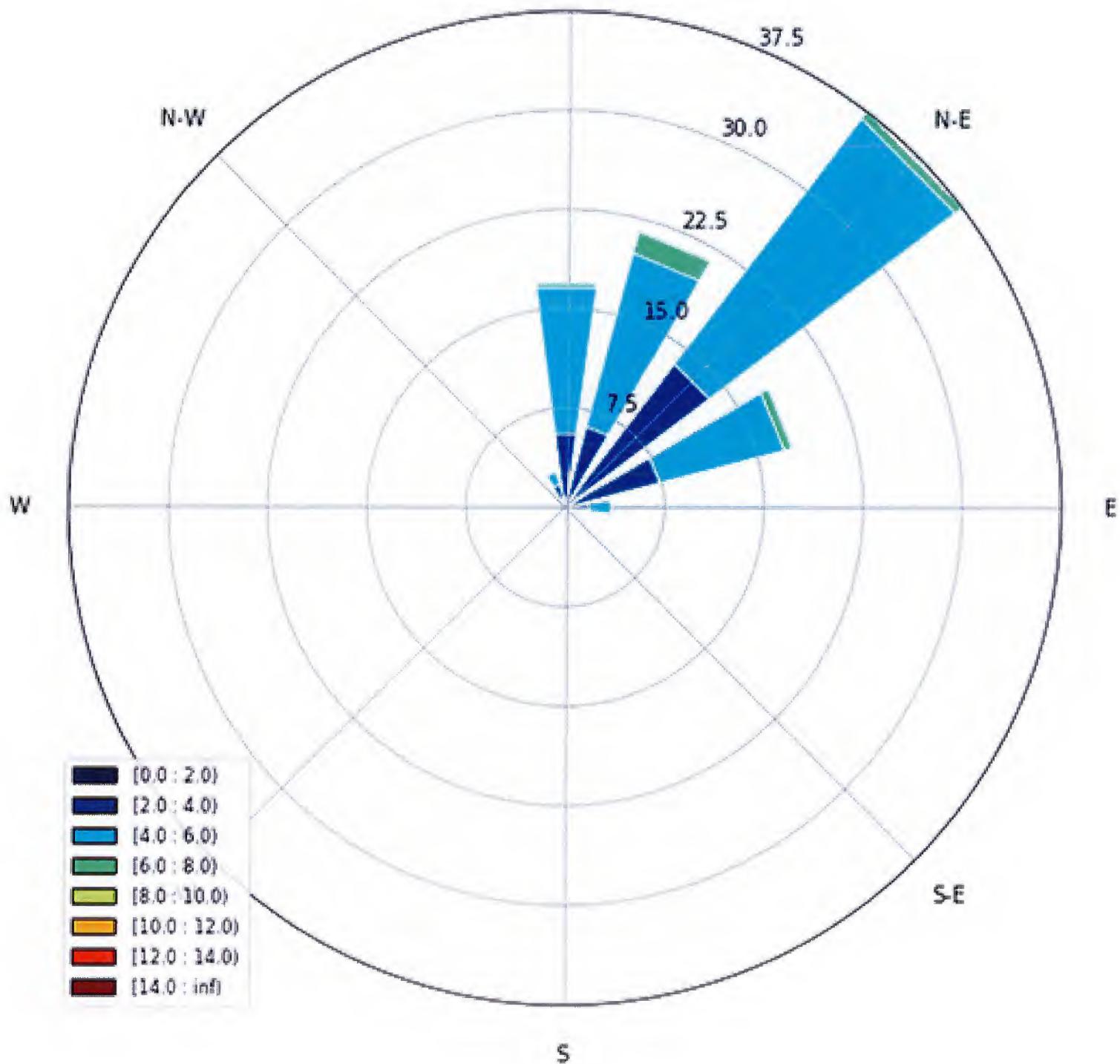
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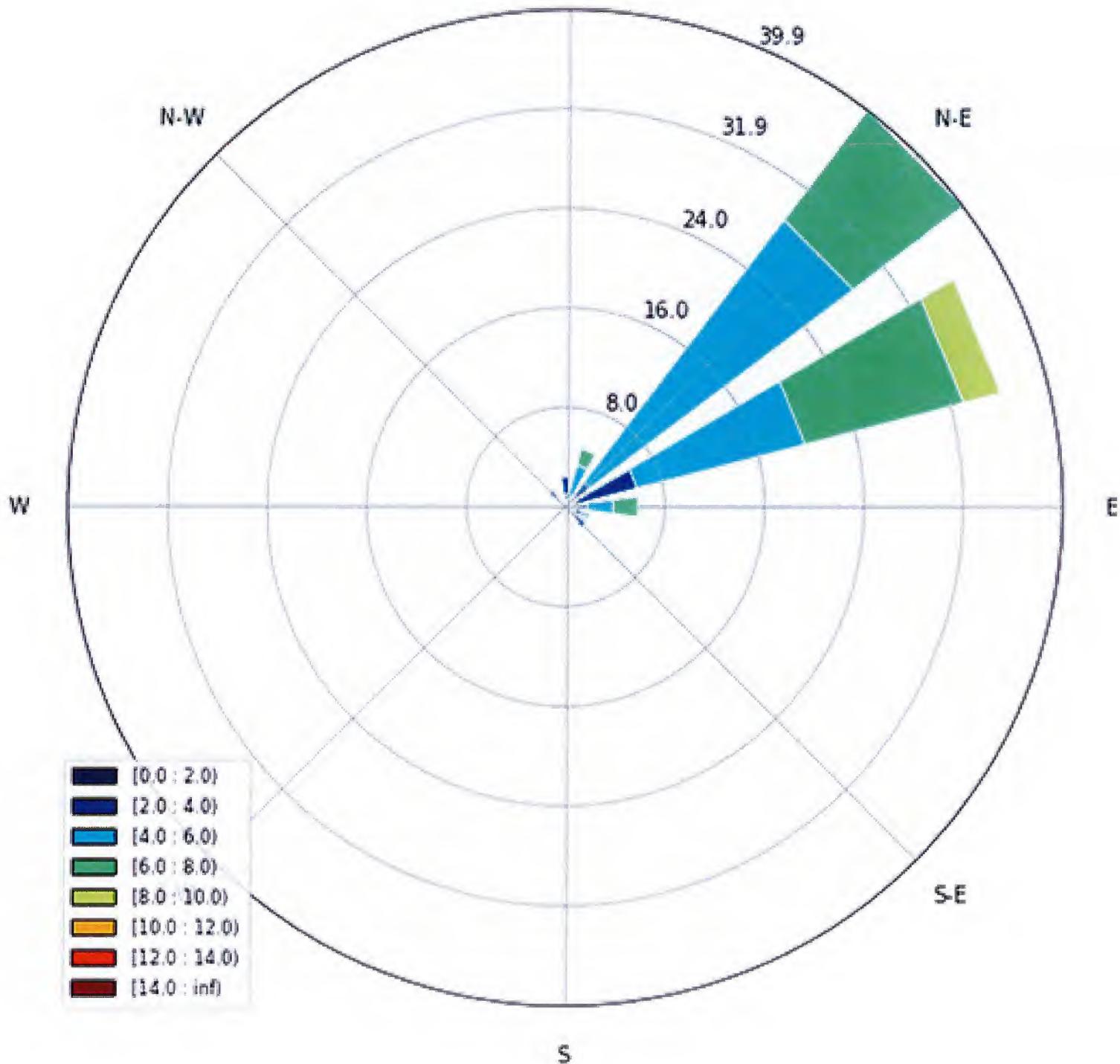
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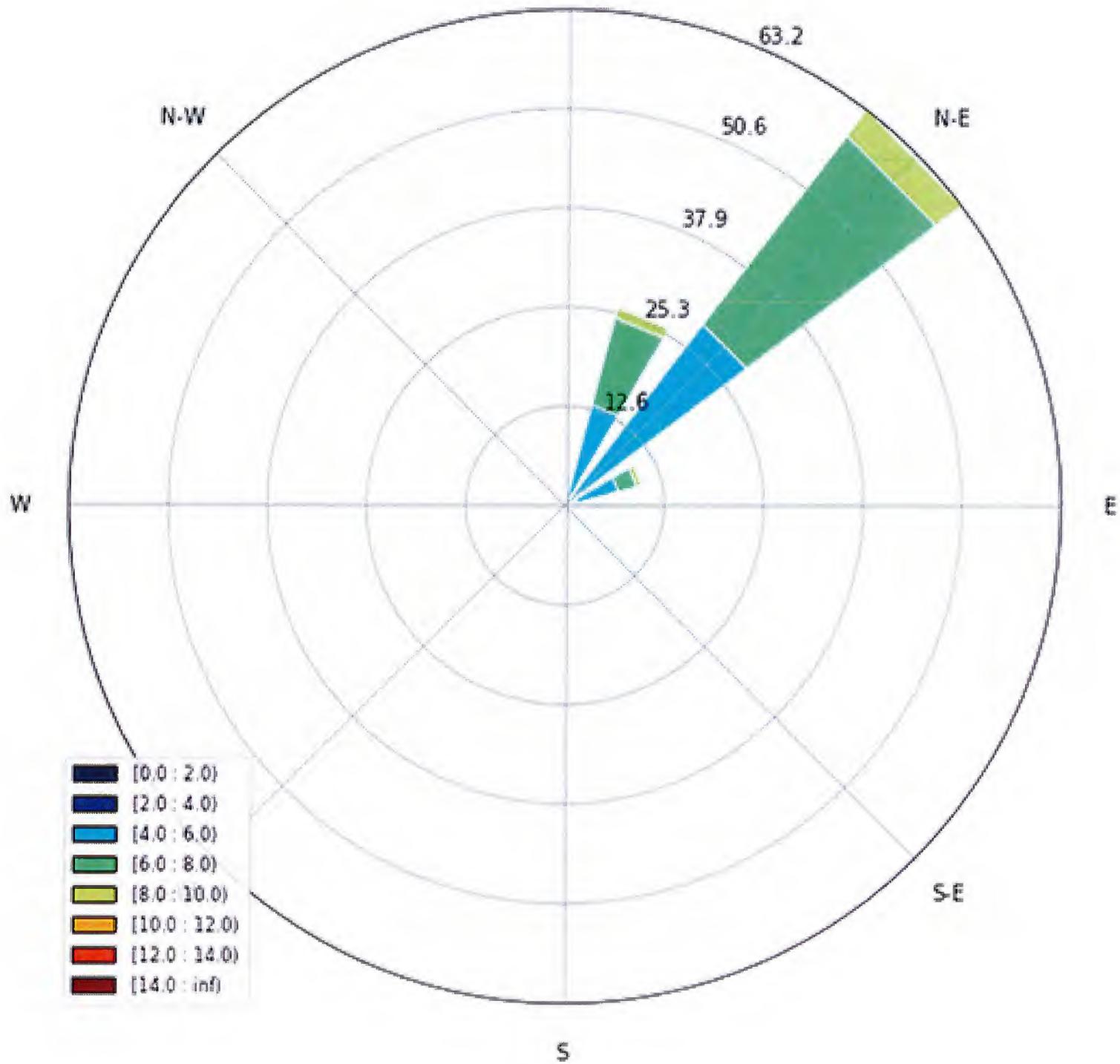
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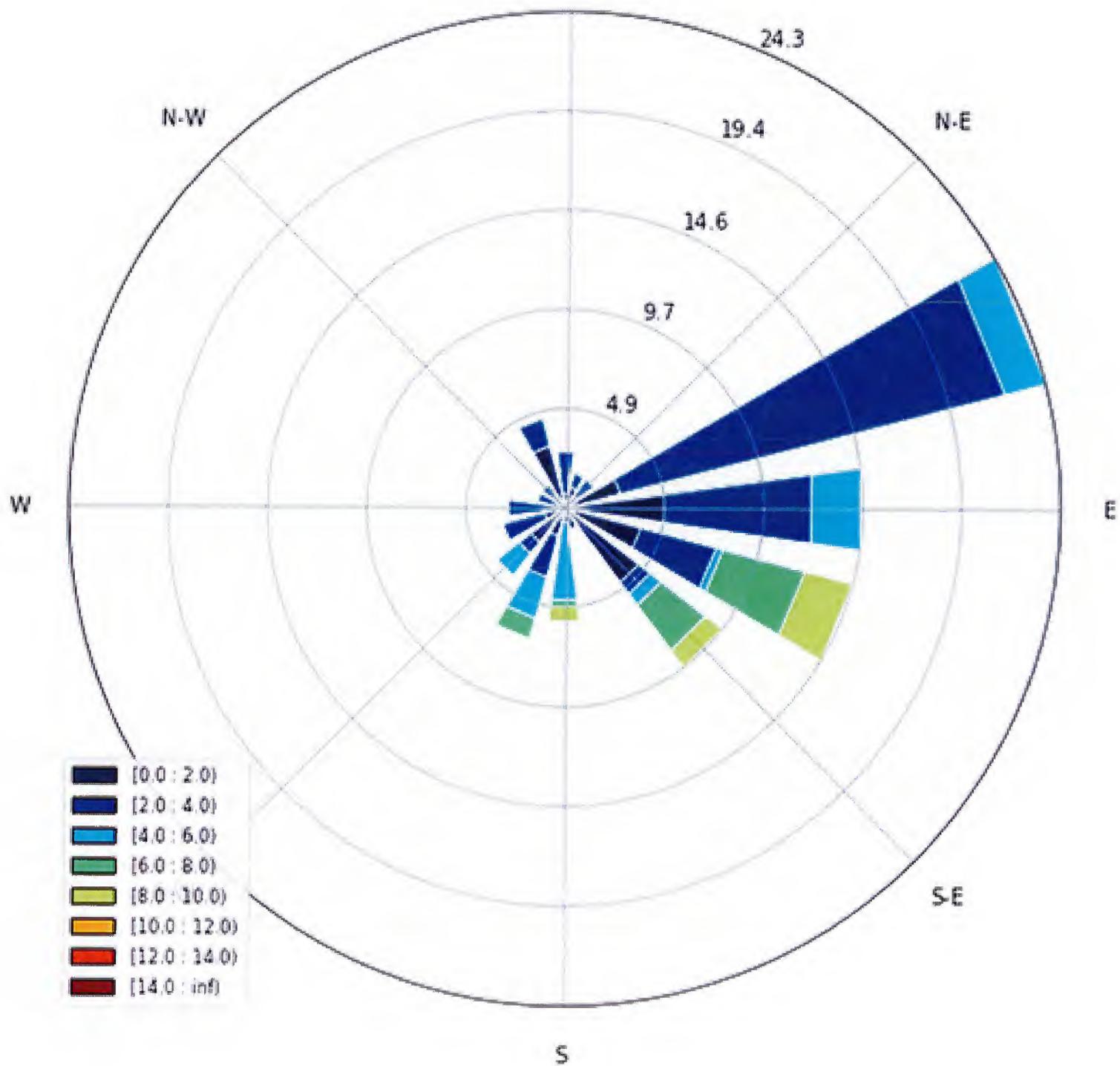
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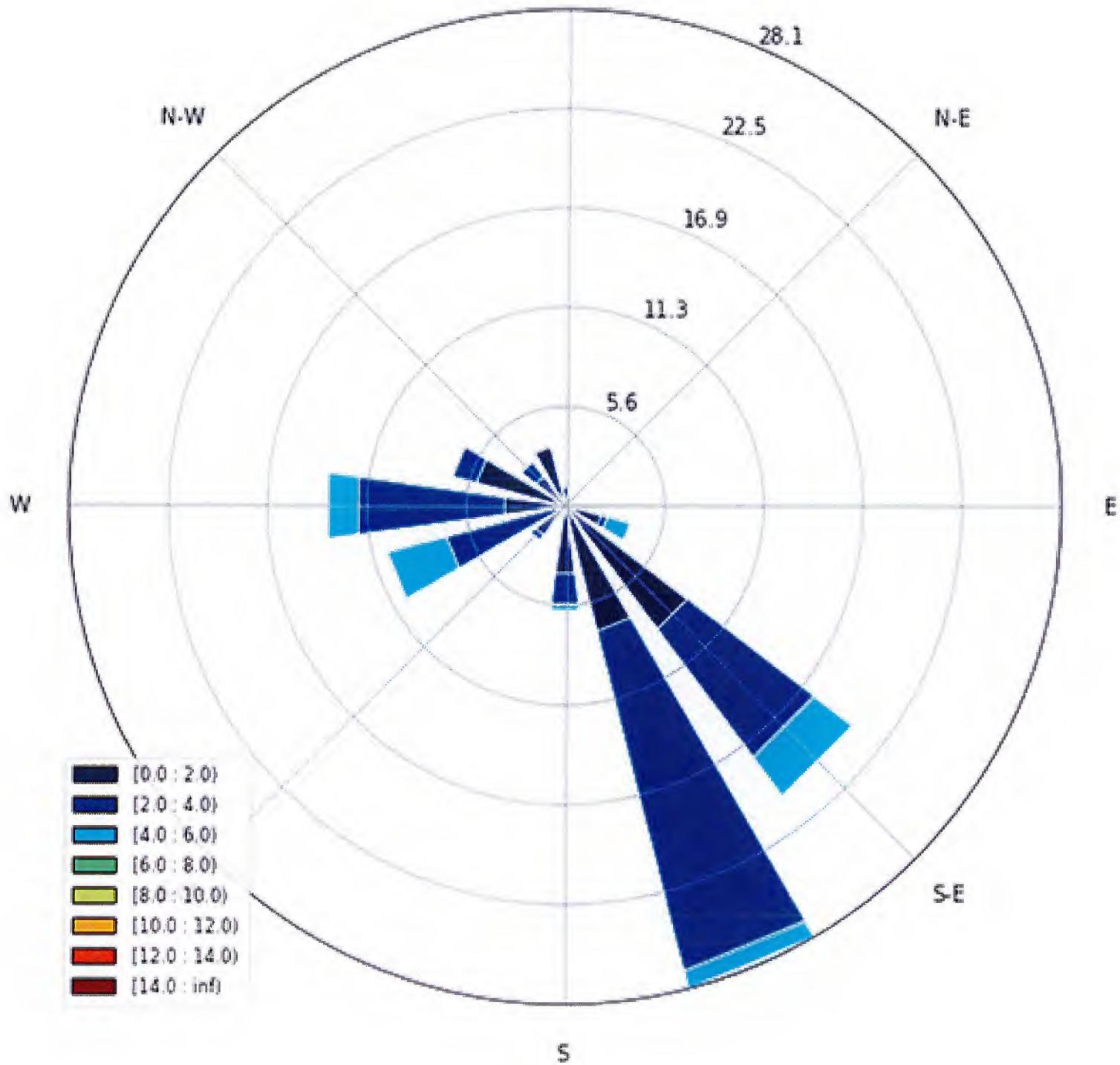
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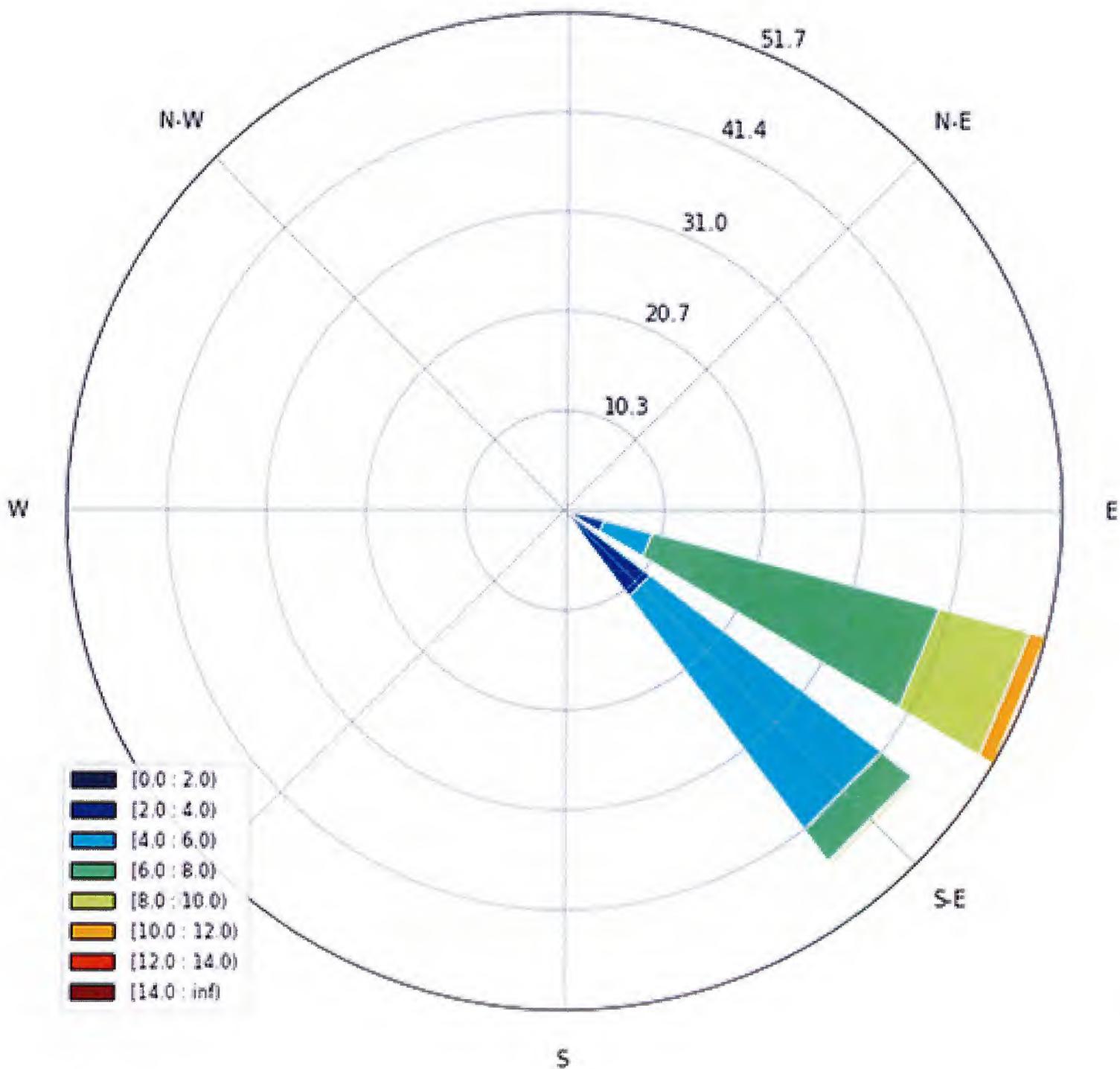
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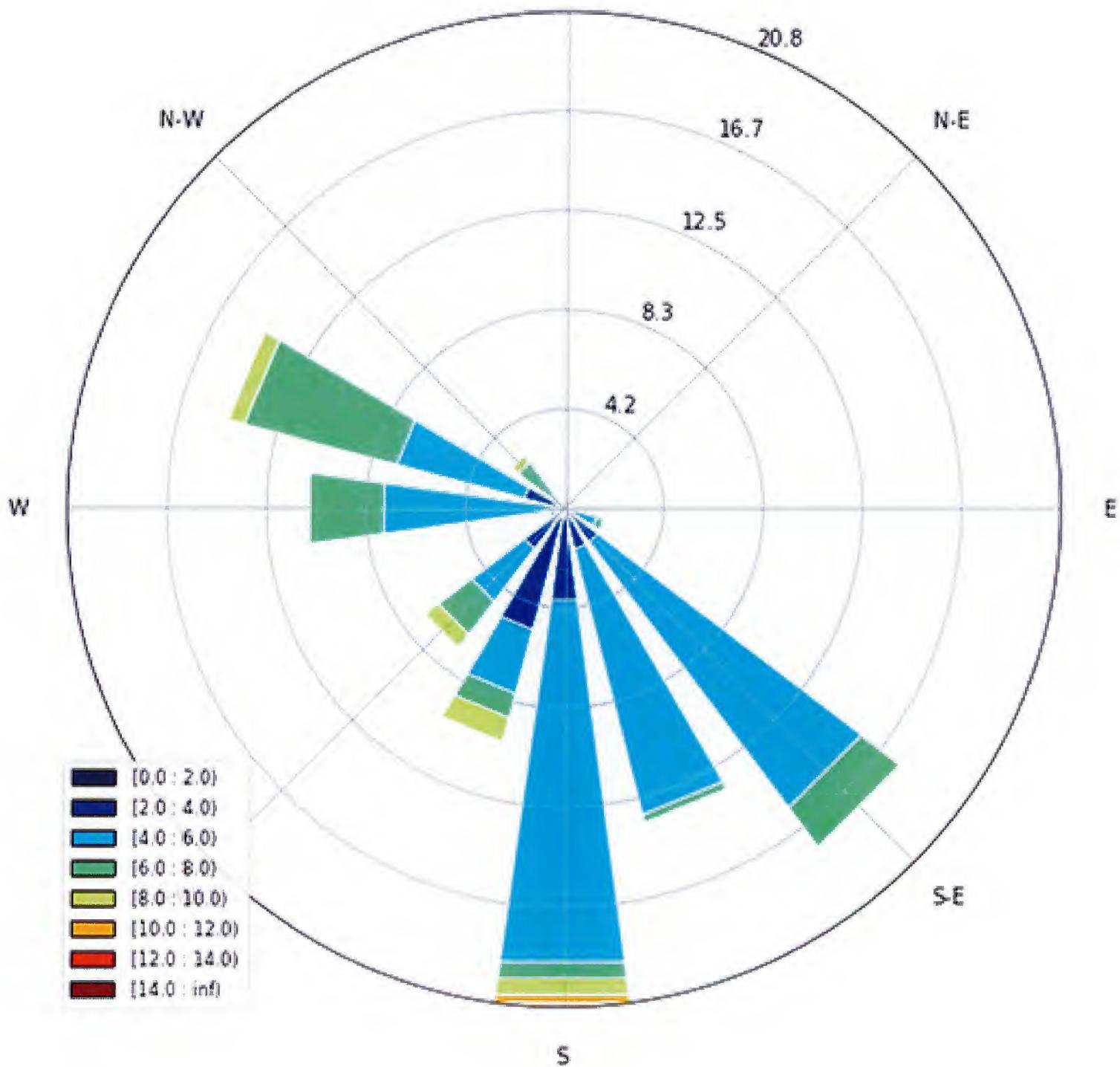
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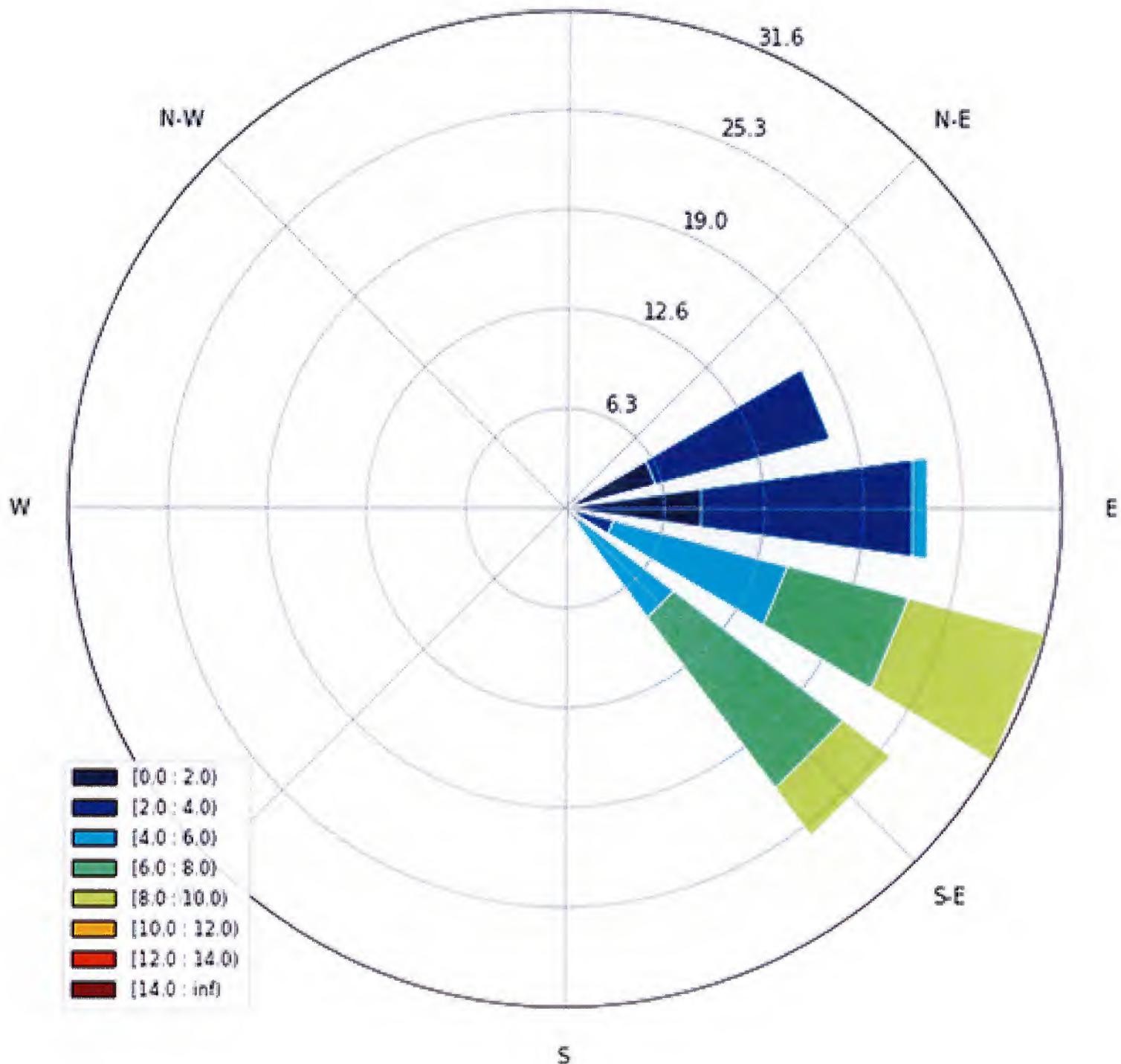
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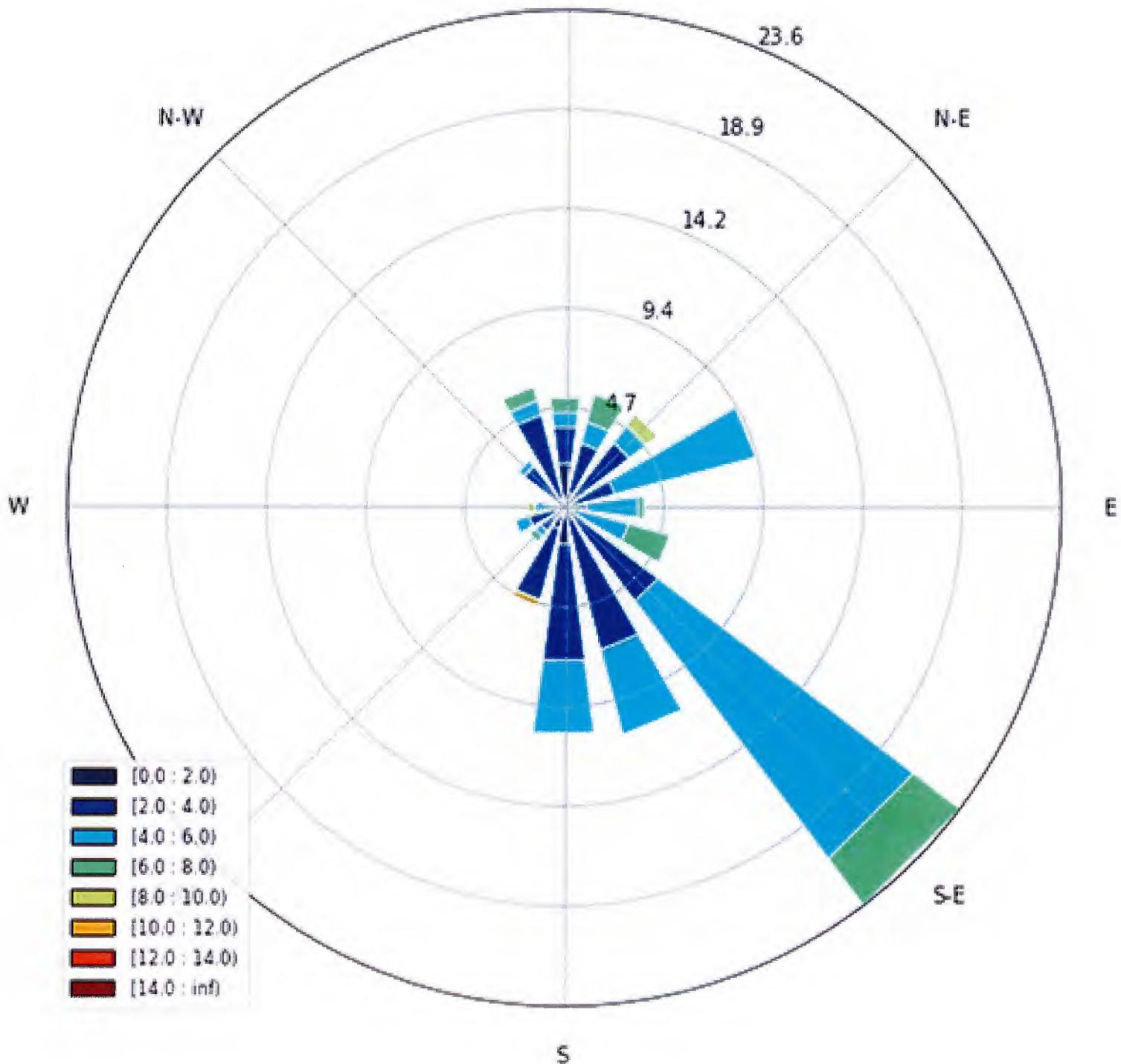
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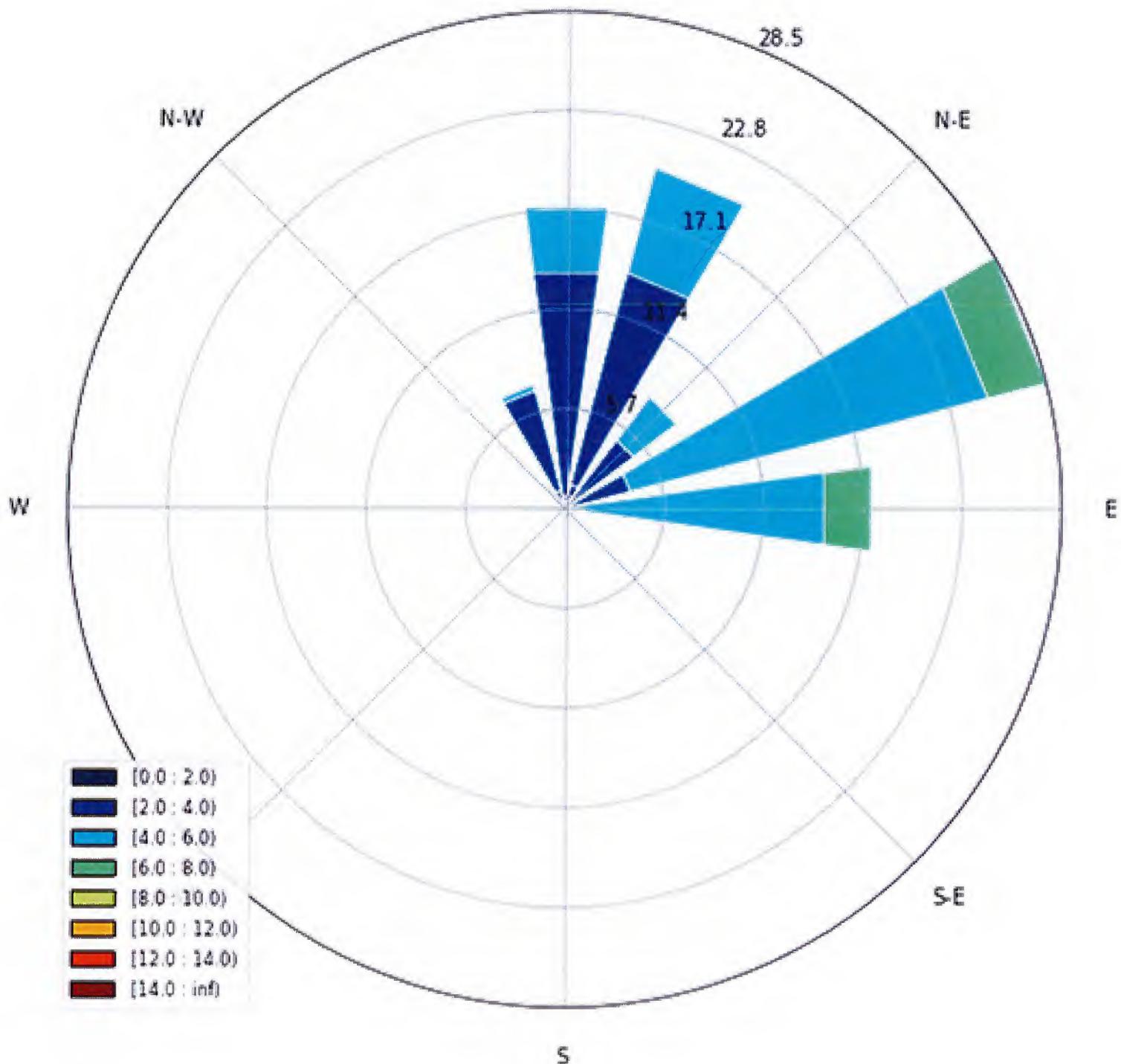
FPC: Sep 24 2018



FPC: Sep 26 2018



FPC: Sep 28 2018



FPC: Sep 30 2018

